Counselor Self-Efficacy: Relationship with Mindfulness and Self-Compassion

Sinead K. Unsworth

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June 4, 2014

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Department Counseling Psychology and Community Services

Degree Doctor of Philosophy

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Sinéad Unsworth
August 2015
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ABSTRACT

Mindfulness training has well-documented effects on psychological and physical health (Davis & Hayes, 2011). Recent findings suggest that mindfulness may be a predictor in counselor self-efficacy (Bentley, 2008; Greason & Cashwell, 2009; Kane, 2010). However, a review of literature indicates that this relationship, along with the mediating effects of self-compassion, have not been examined quantitatively with mental health providers-in-training. This study examined the predictive relationship between mindfulness and counselor self-efficacy and the potential mediating effects of self-compassion. A total of 213 mental health providers-in-training were surveyed to determine their levels of mindfulness, self-compassion, and counselor self-efficacy. Three scales were used to measure the variables in this study: Five Facet Mindfulness Questionnaire (FFMQ), Self-Compassion Scale (SCS), and Counselor Self-Efficacy Scale (CSES). A mediator pathanalysis supported the hypothesis that mindfulness is a significant predictor of counselor self-efficacy. However, results indicated that self-compassion was not a mediator of the mindfulness and counselor self-efficacy relationship. Implications for the use of mindfulness as a development of key counselor preparation outcomes are discussed.
CHAPTER I

LITERATURE REVIEW

Mindfulness is a construct that has garnered a surge of recent interest in psychological treatment, wellness approaches, and brain research (Baer 2003; Davidson et al. 2003; Keng, Smoski, & Robins, 2011). Some researchers define mindfulness as a Western secular skill that can be used independent of religious beliefs (Bishop et al., 2004), while others define it as one component in an interconnected system of a spiritual practice (Keng et al., 2011). Practices for cultivating mindfulness are often grounded in spiritual traditions of Buddhism and increasingly, mindfulness has come under scientific examination. However defined, there has been a sharp increase in mindfulness research. A review in Psychlit indicates a growth from approximately 350 peer-reviewed articles on "mindfulness" in 2005, to almost 1800 peer reviewed articles in 2012 (Germer, 2012).

An interesting aspect of mindfulness research has been an exploration of mindfulness as a skill (Germer, Siegel, & Fulton, 2005; Stanley et al., 2006). Evidence-based research has contributed to the increasingly growing acceptance of mindfulness skills as a psychotherapeutic technique for improving mental and physical health (Baer & Krietemeyer, 2006). Naturally, the compelling results of client outcomes generated from mindfulness research has led to the adaptation of mindful psychotherapeutic approaches for non-clinical populations; mental health providers. Particularly, there has been emerging research and theoretical evidence supporting mindfulness as a skill to enhance
counseling skills for counselors-in-training. (Christopher et al., 2011; Greason & Cashwell, 2009). The outcomes of mindfulness practice have included reports of improved counseling skills, counselor self-efficacy, and self-compassion (Baer, Lykins, & Peters, 2012; Greason & Cashwell, 2009). However, while the role of mindfulness has been identified as a variable that can influence self-compassion and counselor self-efficacy, its relationship with key aspects of counselor development has yet to be fully explored. This dissertation study explored the strength of the relationship between mindfulness, self-compassion, and counselor self-efficacy. The following literature reviews the history of mindfulness, followed by important definitions, and therapeutic methods. Benefits of mindfulness are explored as it relates to clients and therapists, including the potential of mindfulness as a training tool to improve skills of counselors-in-training. The variables of self-compassion and counselor self-efficacy are defined and relevant research is reviewed. I conclude this chapter with the purpose of the study, research questions, and rationale for this research.

Mindfulness

Buddhist and Western Understandings of Mindfulness

Mindfulness is a term derived from the Buddhist scripts of a Pali-language, from a word Sati- meaning, ‘to remember’ with a type of consciousness that signifies being mindfully present (Brown et al., 2007). Buddhism is a philosophical religion that developed in India based on the teachings of Siddhartha Gautama, who is commonly referred to as ‘the Buddha’. According to Buddhist scriptures, Buddha (which means ‘the awakened one’) was reported to have lived in the 4th and 5th Centuries, and shared his
teachings to enable people to reduce their own suffering (Herbrechtsmeier, 1993). In brief, mindfulness is an age-old term derived from Buddhist religion and was used as a tool to reduce suffering.

Buddhist mindfulness has remained a practice that is used within an interconnected system of other spiritual practices to reduce suffering, and is primarily used for introspective awareness of one’s physical and psychological experience (Keng et al., 2011). Central Buddhist teachings include the notions of impermanence, non-self, and suffering, which guide the practice of mindfulness. Correspondingly, the Buddhist form of mindfulness has also served as a foundation for the development of Western mindfulness, which has developed in an effort to adapt the concept of mindfulness for secular practice.

The Western applications use mindfulness primarily as a self-regulation tool, and highlight and expand the awareness aspect to include both one’s internal (introspective awareness) and external experiences (Keng et al., 2011). A description of definitions proposed by Western mindfulness scholars will be delineated as well as the functions that mindfulness is comprised of next.

Mindfulness and Western Psychology

**Defining and operationalizing mindfulness.** A standard definition of Western mindfulness has proved to be a challenge in operationalizing mindfulness research. Within a Western perspective, the complexity of the construct of mindfulness leads to challenges in operationalizing mindfulness for research purposes. Certain mindfulness researchers define mindfulness by its present-centered aspect very simplistically as
“moment-by-moment awareness” (Germer, 2005, p.6). Other definitions focus on the complex state-like quality of mindfulness: a “state of psychological freedom that occurs when attention remains quiet and limber, without attachment to any particular point of view” (Martin, 1997, p.291). John Kabat-Zinn highlights the attitudinal components of mindfulness “paying attention, a particular way: on purpose, in the present moment, and non-judgmentally” (Kabat-Zinn, 1994, p. 6). Baer emphasizes the non-judgmental aspects: “the non-judgmental observation of the ongoing stream of internal and external stimuli as they arise” (Baer, 2003, p.125). These definitions are useful in highlighting various aspects of mindfulness. Depending on the research or clinical focus, various components of mindfulness may be highlighted, which gives rise to distinctive definitions describing the same construct.

In reviewing mindfulness literature, a clear consensus in defining and operationalizing the construct of mindfulness has not been reached. A reason for the lack of consensus on both a proposed and operationalized definition of mindfulness is due to a wide diversity of the traditions and utility of mindfulness. However, there has been a concerted effort to move towards a proposed definition of mindfulness. In fact, several mindfulness experts recently proposed a standard operationalized definition of mindfulness (Bishop et al., 2012).

*Two functions of mindfulness.* Within the last decade there have been systematic efforts to move towards developing an empirically-based operational definition of mindfulness. In efforts to clearly operationalize mindfulness, Bishop et al., (2004) have delineated two functions of mindfulness: cognitive and attitudinal.
The cognitive component, Self-Regulation of Attention (SRA), involves using attention to observe the present moment, while monitoring both internal and external events. SRA permits awareness of feelings, thoughts, and sensations that arise in the stream of the consciousness. Thus, SRA is a process that increases awareness of direct experience in a non-elaborative manner.

The attitudinal component-Orientation to Experience (OE), describes an attitudinal process that involves adopting an orientation to one's present experience that is intentional, curious, open, and accepting. The attitude of being intentional means that one is focusing on the process in a particular non-judgmental way, and not the outcome of the experience. Focusing on the process involves observing thoughts and experience without trying to produce a particular experience.

Both the cognitive and attitudinal components are believed to be achieved and fostered by intentionally focusing one’s attention on experiences such as the breath, which leads one to move away from self-imposed expectations, judgments, and rumination. Bishop highlights the experience of mindfulness: “In a state of mindfulness, thoughts and feelings are observed as events in the mind, without over-identifying with them and without reacting to them in an automatic, habitual pattern of reactivity. This dispassionate state of self-observation is thought to introduce a “space” between one’s perception and response. Thus, mindfulness is thought to enable one to respond to situations more reflectively (as opposed to reflexively)” (Bishop et al., 2004, p. 232). Consequently, the de-identification to internal experiences leads to increased attention, awareness, and flexibility to present-moment events.
The definition described by Martin (1997) applies to the first component: self-regulation of attention. The other definitions, described by Kabat-Zinn (1994), Martin (1997), and Baer (2003) include factors that are shared by both components: such as paying attention to the present moment, in a non-judgmental purposeful manner. Both the operationalized components of mindfulness, which describe the functions of mindfulness, fit with Kabat Zinn’s definition that emphasizes the awareness and intentionality of the concept. Based on the fact that Kabat-Zinn’s definition is applicable to the proposed operationalized definition, as well as the notion that it is widely used as the seminal definition of mindfulness, Kabat-Zinn’s definition of mindfulness will be used for this study. Next, the concept of mindfulness will be fleshed out to describe the various forms of mindfulness.

**Mindfulness as a state, trait, and skill.** There has also been support for the conceptual definition to be derived using a number of forms: trait, state, or skill. Some researchers emphasize the state-like components of mindfulness (Ritchie & Bryant, 2012). A mindful state can be induced by mindful practice and is temporary. It includes using one's attention to be mindful of one’s internal state (Ritchie & Bryant, 2012). The practice of using mindfulness skills to produce a mindful state is viewed as an adaptive coping skill for mindless maladaptive cognitive, emotional, or behavioral patterns. Bishop et al., (2004) also view mindfulness as conceptually closer to a state than a trait, because they believe a mindfulness state is dependent and maintained by regular mindfulness practice. Without the practice and the focus on attending to the moment in a particular way, a state of mindfulness would decrease and end.
Other researchers conceptualize mindfulness as having trait-like components as well (Brown & Ryan, 2003). A trait is an inherent characteristic that one possesses that predisposes one to act in a particular way in their environment. Brown and Ryan (2003) surmised that those who exhibit mindfulness traits would have a proclivity to possess more of a mindfulness state. Conducting several quantitative studies: correlational, quasi-experimental and laboratory studies, these researchers measured both trait and state mindfulness in college and non-college participants. Findings from their sampling studies indicated both trait and state mindfulness were found to predict emotional well-being and self-regulation. Brown and Ryan’s findings support the notion that both trait and state mindfulness are measurable constructs that may yield emotional and mental benefits.

Findings from other studies support the notion that the mindful trait has been found to correlate with other adaptive traits: emotional intelligence, self-compassion and openness to experience (Baer, Smith, Hopkins, Kriitemeyer, & Toney, 2006), and negatively correlated with lower levels of rumination, negative affect, thought suppression, and other types of thinking patterns that are linked with poorer emotional adaptation (Shapiro, Brown, & Biegel, 2007). Another study generated similar findings: the mindfulness trait was predicted to be associated with lower levels of anxiety, fewer avoidant coping methods, and lower perceived stress (Keng et al., 2011). These studies suggest that mindfulness is correlated with higher levels of adaptive coping strategies and healthier thought patterns that buffer against anxiety and rumination.

Past research has examined how predisposed traits influence one’s level of mindfulness. Walsh, Balint, Smolira, Fredicksen, & Madsen (2009) explored the dynamic
of the traits such as how anxiety with attachment processes can impact level of mindfulness. Researchers found that those with high levels of anxiety tended to be less mindful than those with low levels of anxiety. Attachment anxiety, an object-relations construct that describes a type of bond that a child forms with their mother at an early age, was found to be a negative predictor of mindfulness. Characteristics associated with high levels of anxiety and attachment anxiety-rumination, hypersensitivity, and attentional and interpretive processing biases contrast mindful traits. Subsequently, it appears that certain experiences (i.e. early secure attachment) or traits may lead individuals to inherently possess higher levels of trait mindfulness.

The mindfulness trait was also found to be positively correlated with other psychological well-being indicators including pleasant affect ($r = .32$) and life satisfaction ($r = .29$) (Bishop et al., 2004). In further exploring the relationship between personality traits and mindfulness, Van Den Hurk and colleagues (2011) compared the traits of people who meditate with a non-meditating control group. A personality inventory and a mindfulness questionnaire were administered to participants. As predicted, compared to the control group, mindfulness meditators reported higher levels of openness to experience, extraversion, and curiosity, with a negative relation to neuroticism and conscientiousness. A limitation to this research is that this study did not use a pre and post method. Identifying traits associated with the practice of mindfulness while controlling for inherent traits associated with people who are attracted to mindfulness meditation would assist in eliminating possible confounding variables in future research.

Mindfulness has been argued as an inherent human characteristic with some being
more predisposed to the trait than others, and it can also be fostered with practice and vary widely in degree depending on the individual (Brown & Ryan, 2003). Brown and Ryan (2003) also found support for identification of both trait and state mindfulness having beneficial effects in predicting lower levels of negative affect for participants examined over a two to three week period. Based on the evidence suggesting mindfulness as a trait and skill that can be cultivated with the practice of mindfulness, some researchers approach mindfulness as just a skill-set. In fact, Baer et al.’s (2006) research demonstrated five distinct skills of mindfulness: observing, describing, non-reacting, non-judging, and acting with awareness.

In summary, mindfulness is both a trait and state-like quality, and the fact that it can be fostered as a skill-set in both clinical and non-clinical settings suggest implications for clinical use. Given that mindfulness can be defined as a trait, state, or skill, it is a multiformational construct. Although mindfulness can be a state and a trait, for the purpose of this study, the cultivation of the trait through the use of mindful skills will be examined. Based on the burgeoning literature supporting the benefits of mindfulness, mindfulness-based approaches and practices have been implemented into therapy to foster mindfulness as a skill.

**Therapeutic Applications**

As reviewed, mindfulness has been linked with positive outcomes and personality traits related to wellbeing. Given this link, there has been efficacious research suggesting the clinical application of mindfulness (Keng et al., 2011). There are numerous mindfulness interventions that can be implemented in therapy. This section presents
literature related to the various types of mindfulness-based approaches. A discussion of
cognitive, physiological, and affective mechanisms follows.

**DBT and ACT.** Since the development of mindfulness and acceptance-based
therapies, Germer (2012) notes that there has been a shift from other psychotherapies of
focusing on thoughts, feelings, or behaviors, to paying more attention to the intention of
behavior. Acceptance Commitment Therapy (ACT) and Dialectical Behavioral Therapy
(DBT) are both therapies reflecting mindfulness practices that are not completed within
the context of sitting meditation (Baer & Krietemeyer 2006). Recently developed in the
last half of the century, ACT and DBT both incorporate mindfulness and acceptance
components that validate and accept the client’s current experience while encouraging the
client to change. The ability to accept emotional and physical pain is core components of
mindfulness and has received empirical support for the utility of this belief in mental
health treatment (Segal, Williams, & Teasdale, 2002).

The main dialectic used in DBT integrates modes of acceptance and change in
one’s behavior. DBT uses cognitive-behavioral strategies combined with mindfulness
skills in order to help modify maladaptive thoughts, emotions, and behaviors, while
facilitating acceptance of one’s experiences (Baer & Krietemeyer, 2006). Marsha Linehan
(1993), who is credited with developing DBT for patients with Borderline Personality
Disorder (BPD), believed that formal sitting meditation was too intensive for persons
with BPD. Rather, the multi-component behavioral therapy includes a variety of skills
training, including mindfulness skills that emphasize incorporating mindful practices into
regular daily activities while bathing, washing the dishes, and eating. Linehan believed
that the essential components of mindfulness could be practiced without meditation. Indeed, DBT is viewed as one of the most efficacious treatments for BPD (Robins, Schmidt, & Linehan, 2004). A meta-analysis of numerous DBT studies corroborated findings from previous research, indicating DBT as effective in treating client populations with the following diagnoses: BPD (co-morbid with self-harm behaviors and mood disorders), binge-eating disorder, bulimia and depression. Additionally, this meta-analysis indicated that standard outpatient DBT or modified DBT demonstrated to be more effective than treatment as usual, waiting list, or another active treatment (i.e. antidepressant medication and community treatment by experts) (Keng et al., 2011).

ACT is another type of therapy that does not require sitting meditation for mindful practice. Derived from Relational Frame Theory, ACT’s principles are incorporated from gestalt, experiential, and cognitive-behavioral therapy, in addition to mindfulness techniques (Baer & Krietemeyer, 2006). Key mindfulness components focused on with ACT include acceptance and present-centered attitude.

A number of studies indicate ACT as efficacious in treating a variety of disorders. Namely, ACT was found to be more effective than treatment as usual for affective and psychotic symptoms, and social functioning. For substance abuse and dependence as well as depressive and anxiety symptoms, ACT demonstrated superiority to no intervention at all and similar effectiveness as other treatments such as cognitive therapy, systematic desensitization, and nicotine replacement therapy (Keng et al., 2011). Results from efficacy studies have also demonstrated ACT to be helpful in treating the following conditions: chronic pain, eating disorders, and others mental health conditions (Hayes,
Mindfulness-based stress reduction (MBSR). Prior to the introduction of formal mindful practice implemented into psychotherapy, the origins of Western mindfulness began in health settings. In 1979, Kabat-Zinn opened a MBSR clinic in Massachusetts’ Medical School for clients with chronic physical illness who were not responding to his prescribed medical treatments. MBSR is a medical method used to reduce stress, improve self-regulation, foster present-moment awareness and help clients reduce regrets and concerns. Kabat-Zinn created the MBSR method to assist clients in bringing awareness to their symptoms by focusing on the present.

MBSR is a structured 8-10 week group comprised of weekly 2.5-hour sessions. Different forms of mindfulness practice are used including: mindful yoga, mindfulness meditation, and mindfulness skills for social interactions or stressful situations (Baer & Krietemeyer 2006). Clients are instructed to practice 45 minutes of mindful practices daily. These clinics have shown to be very successful with clients, as clients began to recognize that their experience of their physical or emotional pain was exacerbated by their negative reactions and perceptions of the pain (Baer & Krietemeyer 2006).

Client success from MBSR programs sparked interest in the psychology field for integrating mindfulness and psychotherapy. Additionally, Kabat-Zinn’s publication of practical books on mindfulness for the general public to use mindfulness has generated much popularity and success. Hence, the influence of Kabat-Zinn and his MBSR program has had significant influence within the psychotherapeutic community.

Outcome research of randomized controlled MBSR studies indicate improvement
in functioning for the following clinical and non-clinical populations: college students, patients with cancer, heart disease, fibromyalgia, or multiple sclerosis, health care professionals, community adults and corporate employees. Particular symptom improvement includes reduction in anxiety, depression, anger, rumination, psychological distress, perceived stress, and medical symptoms, and an increased sense of spirituality, satisfaction with life, and quality of life (Grossman, Niemann, Schmidt, & Walach, 2004; Keng et al., 2011).

**Mindfulness-Based Cognitive Therapy (MBCT).** Another area in psychology that mindfulness has expanded is in cognitive behavior therapy (CBT). MBCT, which was developed by Segal, Williams and Teasdale and is based on Kabat-Zinn's MBSR program, is an eight-week manualized group intervention program that was specifically created as a relapse prevention method in remitted depression (Segal et al., 2002). Unlike CBT, which is focused on modifying cognitive distortions, MBCT first focuses on the underpinnings of one’s relationship with one’s thoughts and to accept what is. One of MBCT’s principles explicates that by not resisting the thoughts, the power of the thought weakens, allowing one to detach from the distressing thoughts. Thus, it is suggested that MBCT has enhanced CBT by combining elements of cognitive therapy and mindfulness training, in examining one’s relationship to emotional pain, in addition to restructuring thought patterns (Segal et al., 2002).

A meta-analytic review of MBCT outcome research has demonstrated efficacy for MBCT in the treatment of remittent depression. Interestingly, there is support that MBCT reduces relapse rates of depression for clients with three or more episodes of depression,
but has not demonstrated a reduction in relapse rates for clients who have only
experienced two or less episodes of depression. Hence, MBCT appears to be a method
that is more effective for people who have at least three episodes of depression. However,
preliminary evidence from Keng and colleagues suggest MBCT is more effective than
treatment as usual in reducing depressive symptoms for currently depressed patients.
Additionally, modified MBCT has also found to be effective for bipolar disorder and
social phobia (Keng et al., 2011).

The approaches reported above, ACT, DBT, MBSR, and MBCT, were reviewed
due to their clinical popularity and evidence-based support. Other mindfulness
therapeutic approaches that have recently been developed and are growing in empirical
support for clinical applications include: Mindfulness-Based Eating Awareness Training-
for eating disorders and related issues (Kristeller, Wolever, & Sheets, 2013);
Mindfulness-Based Relapse Prevention-for addiction (Witkiewitz, Greenfield, & Bowen,
2013); and Mindfulness-Based Relationship Enhancement-for relationship issues
(Carson, Carson, Gil, & Baucom, 2004). Regardless of clinical applications, mindfulness
has been demonstrated to be associated with positive changes in human functioning.
Another practice that can be practiced as part of a therapeutic method or on its own, is
called mindfulness meditation.

**Meditation.** One type of a formal mindful practice, referred to as mindfulness
meditation is integrated in client practice for MBCT and MBSR. Of note, terms such as
mindfulness and meditation are often used interchangeably in contemplative literature.
However, mindfulness and meditation are not the same terms. Meditation is one of the
modes in which one can practice and cultivate mindfulness. However, one does not need to meditate in order to practice mindfulness and so, mindful practice can occur without meditation. There are different types of meditation but for this study, mindfulness meditation will be explored and refers to a type of activity of self-regulation that intentionally does not focus on cognition (Stauffer, 2007). Specifically, mindfulness meditation is a type of mental training that involves the practice of sustained attention and purposefully paying attention to one's inner experience in a non-judgmental way (Kabat-Zinn, 1994). Empirical research has supported the notion that mindfulness increases with meditative practice, which can lead to symptom reduction in a range of mental health and physical issues, and increase in feelings of wellbeing (Baer et al., 2006).

When meditating, usually one is seated in a comfortable position in a quiet environment with their eyes closed. Activities while mindfully meditating include directing attention to one's present-centered experience, and redirecting attention whenever one's mind wanders away from a present-centered focus. Often, it is helpful for meditators to label what types of experiences are arising, such as emotions, feelings, or thoughts (Sedlmeier et al., 2012). Examples of types of labeling thoughts are 'is this thought I am having a judging thought?' or, ‘I notice my mind wandering and I am creating a grocery list in my mind, that is a planning thought.' By labeling the experience, one can create space between the mental event and the direct experience, thereby decreasing the attachment to the mental events and preventing what is called a 'domino effect' of reacting to a distressing thought with a distressing feeling.
In summary, formal and informal practices of mindfulness have been implemented into mindfulness-based approaches. MBSR and MBCT approaches emphasize the more formal practice of mindfulness (i.e. mindfulness meditation), while others such as ACT and DBT implement informal practices (i.e. DBT skills). Research suggests that formal and informal mindfulness practice can yield benefits whether it is implemented in mindfulness-based therapy, or practiced on its own. A brief review regarding how mindfulness works is discussed next.

Physiological Mechanisms

There has been a strong interest in identifying the underlying physiological mechanisms of mindfulness practice. According to peer-reviewed studies, mindfulness skills such as mindfulness meditation can create both structural and cellular changes of the brain (Gage, 2002). These changes in the brain are referred to as Neuroplasticity—the changing of the brain at various levels due to experiences. Changes due to meditation have been seen through brain imaging studies in the following areas: hippocampus, prefrontal and other cortex regions, as well as frontal and prefrontal lobe (Holzel et al., 2011). These areas are involved with emotion regulation, as well as learning and memory processes.

One of the ways to measure these brain changes is with the use of brain imaging methods such as the electroencephalography (EEG), which monitors brain electrical activity. Using an EEG method, Davidson et al. (2003) conducted a randomized controlled eight-week study to measure effects of mindfulness meditation on brain and immune function. At the end of the eight-week period, participants were vaccinated with
an influenza vaccine. The intervention group had significant increases in both the left-side anterior activation (center associated with positive affect) and antibody titers (level of antibodies in blood) in comparison to the control group. These reports suggest utility of mindfulness meditation for mood and as a 'booster' for immune functioning.

Another brain measurement — magnetic resonance (MR) imagery — was used to measure brain changes in MBSR participants. Holzel and colleagues (2011) examined gray matter concentrations that were hypothesized to be impacted by meditation. Past studies have revealed that debilitating conditions such as posttraumatic stress disorder and major depression, are associated with a decreased gray matter density (Sheline, 2000; Kasai et al., 2008). Thus, gray matter volume has determined to be positively correlated with resilience to aging, and external and internal stress. Subsequently, Holzel et al.’s, (2011) pre-post study found brain changes with significant increases in gray matter in brain regions associated with emotion regulation, learning and memory processes, and perspective abilities. The areas of the brain targeted by meditation practice include areas involved in emotion regulation, learning, and memory processes, all of which are suggested as key areas that are activated for therapists when working clients. These studies provide support for meditation as an exercise for positively affecting structural and cellular changes in the brain.

**Cognitive Benefits**

Cognitive tasks are measures that have shed light in the understanding of the physiological mechanisms of mindfulness. These cognitive tasks measure cognitive skills that are believed to be associated with mindfulness components such as attention,
awareness, and executive control (Baer et al., 2006). Findings from Anicha, Ode, Moeller, and Robinson’s (2012) study, demonstrated a relationship with mindfulness and cognitive abilities. Two facets of mindfulness measured in the study were 'observing' and 'non-reactivity'. Observing is referred to as the ability to be aware of perceptual experiences that may not be perceived by individuals with lower levels of mindfulness. Examples of an observing skill include an awareness of soft music playing in the background or a clock ticking. Non-reactivity is a mindfulness facet that involves the ability to be more reflective rather than reactive in the moment after exposure to a distressing stimuli (i.e. “In difficult situations, I can pause without immediately reacting”, p. 259, Anicha et al., 2012). Both facets are believed to be due to separate brain structures.

Specifically, the observer facet is thought to be reliant on posterior brain processes and the non-reactivity facet functions using anterior structures (Arnsten & Robbins, 2002; Miller & Cohen, 2001). Thus, the observing facet was measured using cognitive tasks that measured perceptual abilities, and the non-reactivity facet was examined with tasks measuring cognitive control and flexibility. Results from Anicha et al.'s study indicate individuals who scored high on the observing facet of mindfulness were found to perform better in perceptual abilities in comparison to low scoring observers. Additionally, high scorers of non-reactivity also demonstrated greater ability for cognitive control and flexibility than low scorers of non-reactivity. As predicted, the non-reactivity facet was correlated with greater cognitive control and flexibility, but no correlation was found with these cognitive tasks and the observer facet. Similarly, the observing facet was correlated
with enhanced perceptual skills, but the non-reactivity facet was not correlated with these skills. These results demonstrate that mindfulness facets are directly related to cognition. Additionally, these findings suggest that mindfulness facets are not mutually related; indicating different facets highlight separate types of cognitive skill. Thus, mindfulness traits do not necessarily function in a uniform manner but are more complex whereby mindful practice influences different areas of the brain depending on the type of mindfulness skill that is being practiced. This information has utility for specific counselor skills training. Tailoring counselor training to meet specific individualized needs, skills training for observing or non-reactivity could depend on the counselor’s level of development in certain mindfulness skills.

One cognitive process that can be impacted by mood and rumination is working memory. Researchers Jha, Stanley, Kiyonaga, Wong, and Gelfand (2010), examined the functioning of working memory over a period of eight-weeks of mindfulness meditation training among a military group prior to their deployment, which is often a highly stressful time. Compared to two control groups of non-meditating military participants as well as non-meditating civilian group, the military meditation group was found to display increased working memory capacity. On the other hand, over the span of eight-weeks, the control group of military non-meditators was found to have decreased levels of working memory capacity, whereas the civilian group was stable over time (Jha et al., 2010). These findings suggest that working memory is negatively impacted by stress and mindfulness meditation can buffer against the cognitive effects of stress. Thus, an outcome of mindfulness appears to be enhanced cognitive functioning due to having
more cognitive energy that is not expended by cognitive processes such as rumination.

Other research has examined another aspect of cognitive functioning, processing speed. Moore and Malinowski (2009) were interested in exploring performance on attention measures in relation to mindfulness. Results indicated experienced Buddhist meditators performed better on all examined measures of attention and also reported higher levels of mindfulness. Cognitive flexibility was also correlated with mindfulness and attention. However, a limitation with the study (i.e. lack of randomization) prevents the ability to strongly assert that mindfulness and meditation were the factors leading to stronger cognitive functioning.

Cognitive flexibility is an ability that can reduce emotional reactivity, and increase ability to self-observe. Having higher levels of cognitive flexibility is also related to having a quicker recovery to return to one's baseline following a negative external stimulus (Siegel, 2007a). This was examined in one study that measured emotional reactivity after participants viewed a distressing picture (Ortner, Kilner & Zelazo, 2007). People who had higher levels of mindfulness (and meditated) were found to return to their neutral feelings more quickly than those who had lower levels of mindfulness (non-meditators) and had increased levels of focus on assigned cognitive tasks. Both cognitive flexibility and emotional reactivity are suggested to be potential outcomes of mindfulness practice.

In summary, these cognitive findings suggest that mindfulness may be used as a skill to assist therapists in enhancing cognitive flexibility, attention, and decrease emotional reactivity, which are all important skills for an effective therapist to develop in
Affective and Interpersonal Benefits

One area that has received considerable attention is the relationship between mindfulness and affective benefits. Specifically, studies have provided evidence linking levels of mindfulness with reduced rumination, anxiety, negative affect, and stress reduction (Chambers, Lo, & Allen, 2008; Hoffman, Sawyer, Witt, & Oh, 2010; Farb et al., 2010; Mckim, 2008; Ramel, Goldin, Carmona, & McQuaid, 2004).

Additionally, enhanced cognitive functions such as meta-cognitive awareness and attention capacities have been thought to positively impact emotion-regulation strategies. Findings such as improved emotion regulation due to decreased reactivity to distressing stimuli, thereby increasing adaptive responding, have been prevalently reported in mindfulness research. Subsequently, evidence supports the notion that mindfulness mediates emotion regulation (Corcoran, Farb, Anderson, & Segal, 2010; Farb et al., 2010; Siegel, 2007b). Mechanisms underlying the effects of change associated with emotion regulation have been proposed to be due to tasks such as an increase in meta-cognition awareness, attentional capabilities, and decrease ruminative thoughts.

As noted above, efficacious outcomes of mindfulness include decreased reactivity and increased response flexibility (Cahn & Polich, 2009). These two components appear to be interacting with each other as decreased emotional reactivity can increase how one responds to stimuli and thus increase cognitive flexibility. Mechanisms associated with change that contribute to these effects include decreased amygdala activity (which is an area of the brain associated with fear) and increased activity in the brain associated with
attentional processes (Goldin & Gross, 2010).

Studies exploring traits associated with mindfulness indicate it is positively related to interpersonal advantages. These benefits include relationship satisfaction due to ability to respond to relational conflict with constructive communication, which includes identifying emotions and utilizing empathy (Barnes, Brown, Krusemark, Campbell, & Rogge, 2007; Wachs & Cordova, 2007). Contrastingly, mindfulness has demonstrated to be negatively correlated with negativity, emotional contagion and stress (Dekeyser, Raes, Leijssen, Leyson, & Dewulf, 2008). Subsequently, empirical evidence suggests that mindfulness can act as a buffer against stress associated with relational conflict (Barnes et al., 2007). Qualities such as meta-cognitive awareness, emotion regulation and an increased ability to resolve interpersonal conflict can lend as an invaluable skills for therapists to use both in their personal and professional life. Research on therapists and mindfulness will be reviewed next.

**Therapists and Mindfulness**

Mindfulness practice has recently been examined as a tool for therapists in enhancing their clinical skills (Aiken, 2006). Mental health providers are required to maintain competencies for particular domains in order to ensure they are meeting the basic ethical requirements within their profession. One of the competencies is referred to as ‘emotional competence’, which is based on components such as one’s ability to manage affect tolerance and transference, and to be aware of how one’s personal issues may affect their professional work with clients. Given that the American Psychology Association (2010) emphasize that emotional competence for clinicians is important to
maintain, mindfulness is proposed as a way for counselors to also take care of themselves and gain insight by continually maintaining their emotional competence.

Unlike other therapeutic approaches in psychology, teachers of formal mindfulness practice assert that it is important for clinicians who are teaching mindfulness to also practice it themselves (NREPP, 2012). Depending on the type of therapy practiced, different recommendations are required for mindful therapists. Both MBSR and MBCT therapists are required to engage in personal practice of mindfulness such as meditation. For DBT and ACT therapists, they are encouraged to understand the definitions and interventions so they can teach their clients, but there is no recommendation of meditative practice (Baer & Krietemeyer, 2006). Thus, clinicians who use mindfulness-based interventions with clients are encouraged to practice it for their own personal and professional growth, but recommendations can vary.

In addition to the several discussed mindfulness therapeutic approaches that treat clients with mindfulness, there is diversity in how the therapist utilizes mindfulness. Germer (2005), a clinical instructor in psychology and a founding member of the institute for meditation and psychotherapy, suggests mindfulness can be incorporated in therapy via:

1. mindful presence that arises from personal practice
2. mindfulness-informal practice or having a theoretical framework that is influenced by mindfulness
3. mindfulness-based psychotherapy: explicitly treating patients with mindfulness. (p.18)
Thus, mindfulness is not only a skill that is adopted for therapists who practice mindfulness-based psychotherapies. Rather, mindfulness practice for therapists can range from solely using it for personal benefits and as a way to improve clinical functioning, to using it to complement one’s mindfulness-based therapeutic approach. Similarly, mindfulness interventions for therapists can be used as a practice for therapists who do not use mindfulness-based therapeutic approaches as well.

Another integral aspect of mindfulness explained in the next section is the clinical benefits found in therapists-in-training that actively practice mindfulness. Within the last 20 years, research examining the impact that mindfulness has on therapists has recently been emerging but is disproportionately smaller in comparison to mindfulness associated with benefits research. Based on the fact that the study of mindfulness with counselors-in-training is new in the field, a surge of qualitative studies have been recently emerging.

Specifically examining mindfulness within therapists, several studies have provided evidence of benefits of mindful practices for therapists. Aiken (2006) qualitatively examined six experienced psychotherapy practitioners who had maintained a mindfulness meditation practice for at least 10 years. Participants reported mindful practice contributed to their empathy, compassion, and presence within client sessions. Another qualitative study conducted with six counselors and counselor educators who practiced mindfulness indicated the following overarching themes: connectedness, gratitude, and intentional living. However, this was nonrandom in nature and thus difficult to generalize (Rothaupt & Morgan, 2007).

Christopher and Maris (2010) conducted a review on several qualitative studies
exploring the impact of a mindfulness course for counselors-in-training. Among the meta-themes across the five qualitative research studies that emerged, the practice of mindfulness was reported to increase acceptance and compassion for themselves, as well as reports of increased confidence and competence in their work with clients and relationships with others. Common themes that directly relate to the current study include reports that mindfulness training reduced fears of inadequacy and incompetence and enhanced their ability to trust themselves as a therapist (Christopher & Maris, 2010). Students in these studies also reported an increase in awareness, patience, empathy, attentiveness, non-reactivity, and non-judgment.

Another study by Christopher and colleagues (2011), who examined counselors’ perceptions of mindfulness training, corroborated findings that mindfulness could be used as a tool for therapists to use professionally and for self-care. Specifically, this qualitative study explores the impact mindfulness can have on beginning therapists. These therapists were originally taught mindfulness techniques in graduate school, and 13 out of 16 at the post-study were still personally practicing mindfulness, and considered it to be a valuable asset for self-care and also professionally. Specifically, common themes identified include personal practice that led to changes in their professional domain: increased compassion for themselves and others, as well as increased level of comfort with the client and ability to tolerate ambiguity in session.

Similar population and methodology from another study yielded similar findings related to beginning-therapists and the use of mindfulness. McCollum and Gehart's (2010) qualitative study examined journals of 13 students, and found outcome effects of
mindfulness meditation such as being present-centered in session, an increased acceptance, compassion, and awareness of modes in therapy.

Results from these studies indicate mindfulness may be helpful in cultivating components of the therapeutic process: empathy and attention, as well as reducing burnout and increase basic counseling skills. Moreover, these studies suggest compelling support for the contribution of mindfulness to students’ professional development. Notably, self-compassion and increased feelings of counselor self-efficacy are common themes reviewed as benefits of mindfulness practice. A limitation to the studies above, which is indicative of qualitative research, is the inability to determine magnitude and the range of change that occurs with the practice of teaching mindfulness to counseling students. Additionally, in reviewing a lot of the studies above, no randomization with selection of trainees occurred because the trainees had chosen to take the mindfulness classes that were offered by researchers. Rather, these studies provide preliminary findings suggesting mindfulness may be a useful training method for counselors-in-training.

Recent quantitative studies have emerged, which help to remedy the dilemmas of qualitative research. Buser, Buser, Peterson, and Seraydarian (2012), conducted an experimental study that measured the effect of amount of mindfulness practice in counseling trainees (n=59) for their counseling skills development. This was one of the first studies that began to bridge the gaps in the literature for mindfulness in counselor education. This study assessed the impact of mindfulness practice by studying three groups of counseling trainees, a control group (no practice of mindfulness but received
standard skills training only), a brief group (five sessions of mindfulness practice), and an extended group (11 sessions of mindfulness practice). Researchers measured change in skills by observing students’ counseling skills with a role-play client. Results indicated improvements in counseling skills for participants in the brief and extended groups compared to the control group, but no significant differences emerged between the brief and extended group. Additionally no significant differences for one subscale that measured counselor exploration skills between the control and brief group. Researchers suggested that their small sample size may have contributed to the lack of statistical significance for the skills between control and brief intervention groups. Also, these results suggest that large amounts of mindfulness practice may not be necessary in order to see improvement in counseling skill development. The researchers proposed more specific mindfulness interventions that are used to focus on improvement of specific outcomes variables (e.g., attention, anxiety, or counseling self-efficacy). Conversely, they suggest that these variables should receive more attention in research to determine which of them are key components of counselor development (Buser et al., 2012).

As reviewed above, there has been no standardized method to examine how quickly therapists can enhance their skills with mindfulness interventions. With this task in mind, Dunn, Callahan, Swift, and Ivanovic (2013) measured the impact of short-term mindfulness interventions for therapists. Therapists were instructed to complete a five-minute exercise prior to client sessions. Results from this empirical quantitative study demonstrated that the clients viewed their therapists as significantly more effective than therapists who did not practice the pre-session mindfulness exercise. This study measured
effectiveness in terms of client perceptions of their therapists and provides support that client’s may experience benefits from mindful therapists. The results also suggest that mindfulness interventions may not need to be practiced formally or over a long period of time for benefits to occur.

Another study attempted to examine the effects of mindfulness meditation with psychotherapists. Wang (2007) conducted a quantitative and qualitative study to explore two groups of psychotherapists who were either reported as meditators or non-meditators. Quantitative results demonstrated no significant differences between the groups for attention or awareness levels. However, the meditators reported higher levels of empathy than the non-meditators. Qualitative data between groups also suggested higher levels of attention, awareness, empathy, and compassion in the meditators compared to their non-meditating counterparts.

Other researchers are interested in exploring how mindful therapists impact client outcomes. One study that has recently received a lot of attention for their groundbreaking study is Grepmair et al.’s (2007) work in measuring client outcomes of mindful therapists-in-training. Using a randomized trial study with a control group, 18 doctoral counseling trainees were randomly assigned to a nine-week meditation group vs. a non-meditation group. Grepmair et al. (2007) examined therapists-in-training as an instrument rather than focusing on the effectiveness of therapeutic interventions. Clients reported significant improvements when working with meditating therapists, compared to clients who worked with non-meditating therapists. Nine weeks after the study had begun, client reports were significantly higher in self-awareness, quicker rates of change,
and greater reduction in overall symptoms in comparison to their controlled counterparts. This study lends credence to the perspective that a clinician’s mindfulness practice can influence their clinical practice.

However, there are conflicting findings. Indeed, Stanley et al. (2006) found no significant differences between client outcomes and mindfulness practices or traits of therapists in their study, while examining the relationship of the trait mindfulness with client outcomes among doctoral-level clinical psychology trainees. Contrary to predictions, the trait mindfulness was inversely correlated with client outcomes. In a similar vein, results were found with Bruce’s (2006) randomized quantitative study that measured therapist trait mindfulness with therapeutic outcome and alliance. Another similar study measuring therapists’ relation of mindfulness and client outcomes found no relationship between the variables. A possible limitation to the studies above is the heavy reliance on self-reports of mindfulness. Davis and Hayes (2011) note that less mindful people may inaccurately report inflated levels of mindfulness because they are not aware of how mindful they actually are. Moreover, mindful people may report themselves as having lower levels of mindfulness because they are more aware of what mindfulness is. Notably, the study that found significant results regarding client outcomes (Grepmair et al., 2007) used an intervention study in which participants practiced mindfulness rather than just reporting their levels of mindfulness. Thus, it is suggested that the practice of mindfulness be taken into account when measuring trait levels of mindfulness. Although there is a plethora of research emerging for the support of mindfulness benefits for therapists, further examination of client outcomes with mindful therapists and therapists-
in training is needed to explore whether changes associated with mindful therapists significantly impact a client's therapeutic success.

In light of research and theoretical conjectures supporting the inclusion of mindfulness in counselor education (Buser et al., 2012; Christopher et al. 2011; Greason & Cashwell, 2009; McCollum & Gehart's, 2010), recommendations have been proposed to further examine specific variables related to mindfulness and skill development (Buser et al., 2012; Greason & Cashwell, 2009; Kane, 2010). Although both self-compassion and counselor self-efficacy have been reviewed as mindful outcomes, their relationship with mindfulness has not been established. Recently, traits such as self-compassion and counselor self-efficacy have been examined as components that may positively impact clinicians’ work (Kane, 2010). Self-compassion, followed by counselor self-efficacy will be reviewed next.

**Self-Compassion**

**Defining Self-Compassion**

A growing body of literature indicates self-compassion is a trait that can be fostered with practice (Neff & Germer, 2013). Demonstrated to highly correlate with mindfulness, self-compassion is a concept that has origins in Buddhist traditions. In Buddhist psychology, self-compassion is not viewed as a separate construct from compassion (Neff, 2003b). The Buddhist definition indicates compassion is a term that entails one is worthy of compassion, as well the recognition that the human experience involves suffering and the desire to alleviate it. With self-compassion, one is believed to have an open-mind and nonjudgmental attitude towards oneself and their own suffering.
In Western psychology, self-compassion has been described as a way of relating to oneself, in a manner that does not involve evaluations of self-worth, particularly when one is experiencing suffering of some sort (Neff, 2003b). Suffering can be described as perceiving oneself as inadequate or as a reaction to an external stressor. This definition has been articulated by Neff (2003a) who is known in self-compassion research for constructing and validating a scale that measures components of self-compassion. Self-compassion is conceptually broken-down into three components: 1) self-kindness vs. self-judgment, 2) common-humanity vs. isolation, and 3) mindfulness vs. overidentification. 1) Self-kindness involves acting in a warm, understanding way to ourselves when suffering, feeling inadequate, or experiencing failure. It means acting in a non-judgmental way to ourselves, as opposed to criticizing or belittling ourselves. 2) Common-humanity refers to the recognition that suffering is experienced by all humans, and with that notion one increases connectedness with others thereby minimizing feelings of isolation and feeling like ‘I am the only one who this happens to or who makes mistakes and suffers’. This component of self-compassion helps one recognize that suffering is a shared human experience. 3) Mindfulness involves the manner in which one experiences a distressing event. It involves not suppressing or exaggerating emotional experiences, but to acknowledge and experience them in a balanced manner without getting ‘swept away’ by the distressing emotion. Mindfulness helps the individual recognize that their experience can be framed in a larger perspective of human experiences, and create more of an observatory stance and dis-identification from the distressing stimuli. This is opposite of ruminating or over-identifying with a distressing
issues, and involves separating oneself from the emotion using an observing stance.

In summary, the operationalized definition of self-compassion is comprised of three components: self-kindness, common-humanity, and mindfulness. Having a clear understanding of the various underlying mechanisms of self-compassion is proposed to assist in determining clinical utility of self-compassion, and how these components can be cultivated in therapists. Based on the fact that self-compassion research has only begun to burgeon within the last decade, other concepts well-known in psychology will be described to understand and discern self-compassion from other seemingly similar but distinct concepts.

**Self-esteem vs. self-compassion.** A concept that is more readily identified as a valuable construct both in clinical practice and research is self-esteem. Self-esteem is defined as having a clear sense of how one defines oneself, and refers to how valuable or how much one likes oneself. One’s sense of self is congruent with one’s personal values and often one compares oneself to others to identify one’s worth. Self-esteem is a construct identified as a component highly related to well-being. There have been various scholars who have even suggested that self-esteem parallels mental health (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004). However, there are disadvantages to having high self-esteem, as it has been found to be significantly associated with narcissism (Neff, 2003b), lack of empathy (Baumeister, Bushman, & Campbell, 2000) and difficulty in receiving constructive feedback and defensiveness due to attempts to protect one’s self-esteem (Crocker & Park, 2004). Another ‘pitfall’ of self-esteem is that it is vulnerable to fluctuation, due to the fact that one’s self-esteem is based on evaluations...
of self-worth and comparing oneself to others (Crocker, Luhtanen, Cooper, & Bouvrette, 2003).

Although both self-esteem and self-compassion are correlated with one another, they have distinctive properties. Self-esteem is ego-driven in which one’s worth is based on the identity that one ascribes to various roles, and is based on comparisons of oneself to others (Neff et al., 2007). Self-compassion on the other hand, is an alternative way to relate to oneself, without involving evaluations of self-worth, and recognizes one’s suffering is shared with others. The key difference is that self-esteem differentiates oneself between others while self-compassion fosters connections and shared human experiences with suffering.

One researcher notes that interventions implemented to foster self-esteem have received little support in terms of efficacy (Swann, 1996). In another study that examined both self-compassion and self-esteem, self-compassion emerged as a buffer against depression and anxiety whereas self-esteem did not (Neff et al., 2007). In fact, findings revealed that unlike self-esteem, self-compassion can buffer against anxiety when faced with an ego-threat in a lab setting.

**Self-compassion vs. self-pity.** Another concept that has been debated to be similar to self-compassion is self-pity (Neff et al., 2007). Self-pity is different from self-compassion in that it involves rumination of one’s own experiences. With self-pity, one often feels ‘I am the only one experiencing hardship’, which thereby promotes separateness from others, rather than connectedness (Neff, 2003b). On the other hand, self-compassion offers the space for one to see oneself clearly whereas self-pity can make
it difficult to see oneself clearly and honestly. As noted, although self-compassion is correlated and shares similar conceptual features with other mental-health related traits, it is a distinct construct that is separate from self-esteem or self-pity. Other findings explained next describe the correlation between self-compassion and well-being.

**Self-compassion as a trait and skill.** There is growing evidence suggesting an inverse relationship between trait self-compassion and psychopathology (Neff et al., 2007; Williams, Stark, & Foster, 2008). A meta-analysis of 20 studies indicated a medium effect size ($r = -0.54$) between these two variables (Neff et al., 2007). Moreover, a correlational study indicated a relationship between self-compassion and positive outcomes: happiness, positive affect, exploration, and optimism (Neff et al., 2007). These relationships suggest that people who are struggling with mental health issues such as anxiety or depression may also report low levels of self-compassion. Conversely, people who reported high levels of self-compassion tended to report lower levels of psychopathology. Thus, the current body of research suggests that self-compassion is positively correlated with emotional well-being, and negatively correlated with distressing emotions. Additionally, the clinical utility of self-compassion as a skill to buffer anxiety and depression by reducing negative evaluations has been of recent interest in the literature.

Recently, there have been therapeutic methods focused on enhancing self-compassion for clients. Researchers studying a self-compassion skill-gestalt technique (two-chair method)-found clients reported an increase in social connectedness, and a decrease in anxiety, thought suppression, rumination, and self-criticism (Safran, 1998).
Another study supported self-compassion training as a therapeutic method: significant increases of mindfulness, self-compassion and wellbeing were found with a mindful compassion program workshop (Neff & Germer, 2013). Reports have also demonstrated MBSR groups as effective in increasing self-compassion (Birnie, Speca, & Carlson, 2010).

Based on the support that self-compassion has been inversely correlated with psychopathology and demonstrated to be a buffer against anxiety and depression, the value of examining how this construct may impact clinicians is proposed to be of significance in counselor education. The fact that past research suggests self-compassion is a skill that can be cultivated with practice indicates it may serve as a helpful tool for counselor training.

**Self-Compassion and Mindfulness for Therapists**

There is a dearth of literature regarding how self-compassion impacts clinician’s professional work and counselor self-efficacy. A qualitative study using a grounded theory method yielded exploratory findings linking utility of clinician’s self-compassion as a method to enhance their therapeutic sessions with clients. Clinicians indicated meditation practice helped them increase the quality of their therapeutic relationships, as well as overall acceptance, non-judgment, and compassion (Kane, 2010). Components that hindered self-compassion include: perfectionism, self-criticism, feeling entitled, underserving, and controlling. Key aspects that increase their feelings of self-compassion were reported: self-acceptance, self-forgiveness, close relationships, universality, and practicing self-care (Kane, 2010). Although one cannot generalize these findings due to
the type of research design and small sample size, Kane’s preliminary results suggest that therapist mindful practices can foster self-compassion, which positively impacts their client work.

The results of Harris’s (2011) study yielded mixed findings for self-compassion. Nine doctoral clinical psychology students participated in an eight-week Values-Enhanced MBSR program. Post-intervention, participants reported no changes in level of self-compassion. Measuring mindfulness with the Five Facet Mindfulness Questionnaire (FFMQ), participants increased on some facets of mindfulness (Observing, Describing), but not on others (Acting with Awareness, Nonjudgment, and Nonreactivity). However, frequency of self-care behaviors increased as well as a reduction in perceived levels of stress. The researcher suggests that these findings may indicate mindfulness be implemented in developmental sequence, as some facets of mindfulness may take longer to cultivate than others. Again, these results are not easily generalizable due to no control group, no randomization, and a small sample size. Given that there is not a clear answer regarding the role that self-compassion can have for therapists’ practice of mindfulness, further research is recommended to determine it’s clinical utility for therapists-in-training in enhancing their clinical efficacy and skills.

**Self-Efficacy**

**Defining Self-Efficacy**

Self-efficacy has been defined by Bandura as the degree to which one believes they are capable of performing a particular task (Bandura, 1986). Self-efficacy and perceived self-efficacy are terms that are often used synonymously, both describing one’s
belief of how capable they are to perform in a specific area. Described as a mechanism, self-efficacy can determine how one is going to complete a task, and how much effort one is going to put forth. Thus, self-efficacy directly impacts one's motivation and how capable one believes they are to complete an activity. It can also be a predictor of how much stress one experiences when completing a particular task (Bandura, 1986, 1989). Consequently, one’s self-efficacy can predict varying levels of effort, motivation, behavior, and stress.

Self-efficacy is described in either general or domain specific terms. General sense of self-efficacy refers to one’s global assessment of their capabilities whereas domain specific can involve their academic or occupational self-efficacy. In this study, a domain specific, counseling self-efficacy, will be examined.

**Defining Counselor Self-Efficacy**

Counselor self-efficacy (CSE) is defined by Larson and Daniels (1998) “as one’s beliefs or judgments about one’s capabilities to effectively counsel a client in the near future” (pp.221). This definition refers to a counselor’s beliefs about their capability in providing effective counseling. Drawing proponents from Bandura's social cognitive theory, Larson and Daniels highlight that CSE involves the integration and application of learned cognitive, social, and behavioral counseling skills as well as one's perceived ability to use these skills purposely and effectively with clients.

Past literature has demonstrated CSE to significantly correlate with counselor performance, counselor anxiety, and the supervision environment (Friedlander, Keller, Peca-Baker, & Olk, 1986; Kopala, 1987). It is hypothesized by researchers (Friedlander
et al., 1987) that the relationship between CSE with performance and anxiety in session is due to the beliefs one has in themselves. Consequently, the belief's one has about themselves can impact the amount of anxiety experienced in session. Additionally, the thoughts accompanying one's belief in completing a task can either assist or hinder task effectiveness. Based on evidence suggesting CSE is related to the amount of clinician anxiety experienced in session, it can also impact the amount of persistence or effort a counselor-in-training will complete (Larson, 1998). Thus, it is construed one's level of CSE can either hinder or enhance development as a neophyte counselor.

For example, a counselor with high CSE would believe that they have the ability to use counseling skills such as reflecting, paraphrasing, validating and summarizing effectively in sessions with clients. Thus, they would be more likely to take risks and may be more flexible with clinical application of skills. Additionally, developing the flexibility in terms of adapting skills to meet various client needs is also a reflection of developed counseling skills. Note that a counselor's beliefs about their CSE is not necessarily akin to their general self-efficacy but specifically relates to their perceived ability to complete counseling skills with their clients. As a counselor-in-training is beginning to learn and develop these counseling skills, their CSE would likely be low. This is a normal phase to experience for developing counselors as they have various skills they need to learn before they feel confident about their counseling skills. A common experience for counselors-in-training is to have a strong ability to cultivate skills but low CSE (Larson, 1998). Even though the trainee may have cultivated a strong skill-set, or is in the process of developing their skills, having low CSE can hinder their development. Low CSE could
often elicit feelings of feeling inadequate and incompetent to perform therapy. In review, low levels of CSE can lead to increased anxiety, and decreased ability and performance to learn new skills (Larson, 1998). A training method that could be utilized to counteract effects of low perceived self-efficacy is mindfulness training. However, little research has been conducted in exploring the relationship of CSE and mindfulness.

**Counselor Self-efficacy and Mindfulness**

Similar to mindfulness, CSE is a construct that is related to cognition and affect. Based on the surge of research that has supported cognitive, emotional, and social benefits of mindful practice, examining the utility of this practice for counselor development has become a topic of interest in counseling research. There is some research that has examined CSE and mindfulness with other components related to counseling skill: attention and empathy (Greason & Cashwell, 2009). Particularly, this past research examined attention and empathy as a mediator role in the relationship of mindfulness and CSE. In Greason and Cashwell’s (2009) study, levels of mindfulness, self-efficacy, empathy, and attention were examined in a total of 179 master’s and doctoral counseling students. Results from this quantitative study demonstrated mindfulness as a predictor of CSE, attention, and empathy. These findings indicate that mindfulness increases aspects such as present-moment awareness and non-judgment, which would lead to an increase in attention and empathy in client sessions. The researchers also found that attention mediated the relationship between mindfulness and CSE. These findings indicate the relationship between CSE and mindfulness is not simplistic but can contain numerous variables that are mediating the relationship. Both
Greason and Cashwell suggest that further study regarding the mediating variables is recommended in order to shed light and increase our understanding of these outcome mindfulness variables. It is suggested that further exploration of these variables in relation to CSE will provide further understanding and an empirically-based direction for counselor development.

Another component that has been shown to negatively impact CSE is anxiety (Hall, 2009). Anxiety is a common experience for beginning counselors and can impede CSE. Hyden’s (2009) findings from a quantitative intervention study supported a mindfulness intervention for beginning counseling students in reducing anxiety. Hyden’s results demonstrated an inverse correlation between state and trait mindfulness and anxiety. This research suggests positive correlations between mindfulness and emotional well-being, and that mindfulness intervention could be used as a way to enhance mindfulness as a state and trait.

In terms of examining mindfulness as a buffer against anxiety for beginning counselors, Hall (2009) examined the relationship between these two variables and counseling self-efficacy. Hall hypothesized that mindfulness and alexithymia would moderate the relationship between anxiety and CSE. Contrary to predictions, Hall’s hypothesis was not supported, as mindfulness and alexithymia were not moderators in the relationship between anxiety and CSE; rather, mindfulness and to a smaller degree alexithymia, were direct predictors of CSE. Specifically, in the data analyses, the observing, describing, and nonreacting facets of mindfulness were demonstrated to be predictors of CSE. This research supports the notion that mindfulness can predict levels
of CSE for beginning counselors.

Based on the fact that anxiety can be a common experience for beginning counselors, which can impede counseling self-efficacy, mindful training may be a method to reduce beginning counselors’ anxiety. To date, only one study has investigated the relationship between mindfulness and counseling self-efficacy: Greason and Cashwell’s (2009) study of CSE and mindfulness. Although mindfulness and CSE were found to be related, understanding the mediating variables (i.e. self-compassion) of this relationship is understudied.

**Counselor Self-Efficacy and Self-Compassion**

It has been theorized by Gilbert (2009), that "people with high levels... of self-criticism can have enormous difficulty in being kind to themselves, feeling self-warmth or being self-compassionate" (p. 199). Other researchers have indicated that people who have low-levels of self-compassion are controlling and rigid with themselves, and tend to treat others around them in a similar fashion (Kane, 2010). Consequently, low levels of self-compassion can lead to a lack of connectedness with others, lower levels of reflectiveness, and increased rumination (Neff, 2003b), all of which can impact CSE and therapeutic relationship with clients.

Stafford-Brown and Pakenham (2012) sought to examine how a 9.5 hour Acceptance and Commitment Therapy (ACT) program with mindfulness components could influence levels of stress and functioning with clients. Outcome variables measured in this study included self-efficacy, self-compassion, and therapeutic alliance. As predicted, participants in the ACT program reported a significant decrease in professional
self-doubt, in comparison to the control group. Results also indicated that even though both the control and treatment group increased in self-compassion, significant differences were found for the treatment group on the over-identification domain in the Self-Compassion Scale. With regards to self-efficacy, significantly greater improvements were demonstrated in the intervention group compared to the control group. Another interesting finding that is related to CSE is levels of self-doubt reports among the students. For the control group, levels of professional self-doubt increased in the pre-post measure and were significantly reduced in the intervention group. These changes in self-doubt were also maintained at the 10-week follow up. The fact that self-doubt can be a normal phase of counseling development, does not minimize the negative effects that are experienced by students due to self-doubt. Indeed, professional self-doubt has been reported as a significant stressor for counselors-in-training (Cushway, 1992). Fortunately, it appears that levels of professional self-doubt can be reduced based on mindfulness training. Other research has corroborated findings of the ACT program study in using mindfulness training to improve functioning in similar reported populations (Saunders et al., 2007; Shapiro et al., 2007).

Another study measured the effects of MBSR in counseling psychology students compared to a control group, and determined a significant increase in self-compassion for counseling trainees that practiced MBSR (Shapiro et al., 2007). The findings of this study provide incentive for implementation of mindfulness interventions in counseling-related program. In supporting CSE, a training method that could be utilized to counteract effects of low CSE is mindfulness training that cultivates self-compassion.
Self-Compassion, Mindfulness, and Counselor Self-Efficacy

An examination of the literature on mindfulness and self-compassion warrants further development to explore how these variables impact CSE. Only one qualitative study using a grounded theory method has examined these variables, which were examined with a sample size of eight experienced-clinicians who were advanced mindfulness practitioners (Kane, 2010). Kane focused on the relationship between mindfulness and self-compassion and the ways in which they impact clinical work. Kane theorized that her findings suggested mindfulness and self-compassion were causal conditions of each other: mindfulness facilitated self-compassion by increasing awareness, non-reactivity, and non-judgment, whereas self-compassion fostered the development of mindfulness by its nonjudgmental quality (Kane, 2010). These variables were determined as having a potential to enhance CSE, but the relationship between these three variables was not explored in depth. Due to Kane’s unique population of participants: experienced professionals who were also seasoned mindfulness practitioners, applicability of results for counselors-in-training cannot be determined as counselors-in-training are determined to be at different developmental levels than experienced professionals. Moreover, one’s developmental level is likely to influence one’s levels of mindfulness, self-compassion, and CSE.

As reviewed, counselors-in-training are vulnerable to anxiety, which can impede their personal and professional functioning. A normal part of counselor development often includes anxiety and having low CSE when counselors-in-training first begin to work with clients. What accompanies counselor anxiety, such as rumination and self-
criticism, can create barriers in developing counselor self-efficacy (Hall, 2009). Mindfulness training that hones self-compassion could act as a way to alleviate possible anxiety due to concerns with skill-set (Hall, 2009), which may enhance CSE.

Additionally, counseling educational methods are usually comprised of didactic methods specifically for behavioral and verbal counseling skills. However, the research on examining counselor educational methods is scant with regards to methods that enhance attention and increase empathic ability (Wyatt, 2012). Mindfulness may be a tool to target these counseling practices. Past research suggests mindfulness may be an important variable in the development of key counselor training outcomes. The results of the current study have implications for counselor training admissions, counselor education, and counseling practice. Additionally, results of past studies point to constructs that may improve counselor development and performance, as well as client outcomes.

**Purpose for This Study**

To date, there are no studies that have examined counseling-trainees' levels of self-compassion and mindfulness with CSE. The purpose of this exploratory study was to address an important gap in counselor education research in investigating the relationships between mindfulness, self-compassion, and CSE in counselors-in-training. Past research (Kane, 2010) has suggested mindfulness and self-compassion are symbiotic variables that predict CSE as an outcome, but to what strength has yet to be established. Similarly, there have been no studies that have examined these variables in a quantitative fashion with counselors-in-training. It is hoped this study can provide a greater understanding of the role of self-compassion and mindfulness in predicting CSE. These
findings may contribute to literature for future training methods for clinicians-in-training
to cultivate CSE, self-compassion, and mindfulness. Understanding the relationship
between these variables may shed light on factors that enhance or hinder CSE. Moreover,
the study of these constructs may provide implications for improving client care.

**Research Questions and Hypotheses**

Research Question 1: What is the bivariate relationship between mindfulness, counselor
self-efficacy, and self-compassion? The Pearson correlation analysis was used to
statistically measure the hypotheses.

   Hypothesis Ia: There will be a statistically significant moderate positive
          relationship between mindfulness and counselor self-efficacy.

   Hypothesis Ib: There will be statistically significant moderate positive
          relationship between self-compassion and counselor self-efficacy.

   Hypothesis Ic: There will be a statistically significant strong positive relationship
          between mindfulness and self-compassion.

Research Question 2: What is the relationship between mindfulness, self-compassion, and
counselor self-efficacy, within a path model that specifies a relationship between
mindfulness and counselor self-efficacy mediated by self-compassion? The statistical
method used was a path-analysis.

   Hypothesis IIa: Mindfulness scores are hypothesized to predict counselor self-
          efficacy scores.

   Hypothesis IIb: Self-compassion is predicted to act as a significant partial
          mediator in the relationship of mindfulness and counselor self-efficacy.
Specifically, higher levels of self-compassion are predicted to strengthen the relationship between mindfulness and counselor self-efficacy.

Research Question 3: What is the relationship between mindful practice and self-reported levels of mindfulness? Statistical method used was a Spearman correlational analysis.

Hypothesis IIIa: It is hypothesized that mindfulness practice will moderately correlate with mindfulness scores.
CHAPTER II

METHODS

In chapter 1, the rationale and literature review for the study of the relationship between mindfulness, self-compassion, and CSE were presented. The review of the literature supports the hypothesis that a relationship exists between mindfulness and counseling self-efficacy and that this relationship may be mediated by self-compassion, suggesting that further research in this area is warranted. This chapter will describe the research methods utilized to answer the research questions listed at the end of chapter 1, and describe the methods that were used to test the hypotheses. This section includes: the composition of participants, types of measures and procedures used, as well as the design and analyses for the study.

Participant Demographics

A total of 262 participants linked onto the Qualtrics website and started the survey. 49 incomplete surveys were removed from the data set. Overall, 213 participants completed the survey. Table 1 presents the frequencies and percentages of the participant demographics found in the present study.
Table 1

*Participant Demographic Information*

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<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
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<tbody>
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<td><strong>Gender:</strong></td>
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<td>Female</td>
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<tr>
<td>Spiritual</td>
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<tr>
<td>Combined</td>
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Table 1 (continued)

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<td>1.4</td>
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<td>.5</td>
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<td>.5</td>
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<td>Masters</td>
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<td>Years of Practicum completed:</td>
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<td>1 year</td>
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<td>2 years</td>
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<tr>
<td>3 years</td>
<td>32</td>
<td>15.0</td>
</tr>
<tr>
<td>4 years</td>
<td>31</td>
<td>14.6</td>
</tr>
<tr>
<td>5 years</td>
<td>30</td>
<td>14.1</td>
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<td></td>
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<td>Academic approaches (class, professional development)</td>
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<td>Mindfulness training with practicum supervisors</td>
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<td>42.3</td>
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<tr>
<td>Religious practice</td>
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<td>18.3</td>
</tr>
<tr>
<td>Other</td>
<td>32</td>
<td>15</td>
</tr>
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</table>
The participants in the current study consisted of 173 women (66%), 39 men (14.9%), and 1 individual who identified as ‘maleish’ (.4%). They ranged in age from 21 to 58 with a mean age of 28.15 and a standard deviation of 5.50 years. The majority of the participants self-identified as Heterosexual, 183 (85.9%), with 16 (7.5%) as Bisexual, 7 (3.3%) as Queer, 5 (2.3%) as Lesbian/Gay and 2 (.9%) as Other. Of the 213 participants, 173 (81.2%) self-identified as Caucasian/White, 10 (4.7%) as Asian American/Pacific Islander, 9 (4.2%) as Hispanic/Latino, 7 (3.3%) as African American/Black, 5 (2.3%) as American Indian/Native American/First Nations, and 9 (4.2%) as Other. Out of the participants who identified as Other, 5(2.3%) identified as Multi or Biracial, 1 (.5%) as South Asian, 1 (.5%) as Jewish, 1 (.5%) as Indian, and 1 (.5%) as Alaskan Native.

For religious or spiritual beliefs, almost half (n =101, 47.4%) of the participants identified as Christian, 29 (13.6%) as Agnostic, 19 (8.9%) as Atheist, 14 (6.65%) as Undefined, 12 (5.6%) as Jewish, 11 (5.2%) as None, 8 (3.8%) as Spiritual, 8 (3.8%) as Buddhist/Zen, and 6 (2.8%) as Other. Other beliefs include: 1 (.5%) as Unitarian Universalist, 1 (.5%) as Pagan, 2 (.9%) as Muslim, 1 (.5%) as Native American Church, and 1 (.5%) as Theist.

Of the total sample, 71% of the participants were in a doctoral program (n=152), while nearly 30% were completing a Masters degree (n=61). Of these programs, 42% (n=90) identified as coming from Clinical programs, while Counseling Psychology accounted for 30% (n=65) of the participants. The other 14% (n=30) came from a variety of related programs. Please refer to table 10 in appendix G for more information on these
participants.

For amount of practicum semesters completed, 74 (34.7%) participants had completed 1 year of practicum, 46 (21.6%) completed 2 practicum years, 32 (15%) completed 3 practicum years, 31 (14.6%) completed 4 practicum years, and 30 (14.1%) completed 5 or more practicum years.

The theoretical orientations of the 213 participants are as follows: 89 (41.8%) identified as Eclectic/Integrated, 34 (16.0%) utilized a Mindfulness-Based Approach, 33 (15.5%) for Cognitive-Behavioral, 13 (6.1%) as Person-Centered, 6 (2.8%) as Psychodynamic/Analytic, 4 (1.9%) as Systems/Family Therapy, 3 (1.4%) as Interpersonal, 3 (1.4%) as Feminist, 3 (1.4%) as Emotion-Focused, 3 (1.4%) as Existential, 3 (1.4%) as Solution-Focused, 2 (.9%) as Developmental Model, 1 (.5%) as Narrative, 1 (.5%) as Cognitive, and 1 (.5%) as Relational Cultural Therapy.

Half of participants reported some form of mindfulness training through academic training in class (n=114, 53.5%), while 90 (42.3%) reported mindfulness training with a practicum supervisor. There were 39 participants (18.3%) who reported formal mindfulness training through religious practice and 32 (15.0%) participants listed other forms of training that fell into the following categories: academic methods (n=13, 7.5%), personal practice (n=8, 4.1%), personal therapy (n=4, 1.9%), and personal reading (n=4, 1.9%). In terms of personal mindful practice, a third of participants (n=49, 28.4%) reported practicing mindfulness meditation on a weekly to daily basis whereas a third reported practice less than once a week (n=78, 36%). 37% (n=78) practiced mindfulness meditation less than once a week, while a third of participants reported never practicing
mindfulness meditation (n = 73, 34.6%). For relaxation activities only 10% (n=23) of
participants reported weekly to daily personal practice of Progressive Muscle Relaxation
(PMR), whereas almost 50% reported less than once a week (n=101). 41% (n=87) have
never practiced PMR. Similar findings were identified for Guided Imagery (GI): 8%
(n=18) reported daily or weekly practice, 35% (n=73) reported less than once a week, and
57% (n=119) reported never practicing GI. For more information on data involving self-
care and professional activities, please refer to Table 11 in Appendix G.

Table 2

Demographic Data: Frequency of Personal, Professional, and Client Activities

<table>
<thead>
<tr>
<th>Frequency of Activity</th>
<th>Personal Practice N (%)</th>
<th>Professional Practice N(%)</th>
<th>Teach as a client intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindfulness Meditation</td>
<td></td>
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</tr>
<tr>
<td>Never</td>
<td>73 (34.6)</td>
<td>51 (24.8)</td>
<td>82 (39.8)</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>78 (37)</td>
<td>122 (59.2)</td>
<td>59 (28.6)</td>
</tr>
<tr>
<td>Weekly</td>
<td>49 (23.2)</td>
<td>26 (12.6)</td>
<td>55 (26.7)</td>
</tr>
<tr>
<td>Daily</td>
<td>11 (5.2)</td>
<td>7 (3.4)</td>
<td>10 (4.9)</td>
</tr>
<tr>
<td>Progressive Muscle</td>
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<tr>
<td>Relaxation</td>
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<td></td>
<td></td>
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<tr>
<td>Never</td>
<td>87 (41.2)</td>
<td>128 (62.4)</td>
<td>60 (29.1)</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>101 (47.9)</td>
<td>55 (26.8)</td>
<td>92 (44.7)</td>
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<tr>
<td>Weekly</td>
<td>16 (7.6)</td>
<td>199 (.3)</td>
<td>50 (24.3)</td>
</tr>
<tr>
<td>Daily</td>
<td>7 (3.3)</td>
<td>3 (1.5)</td>
<td>4 (1.9)</td>
</tr>
<tr>
<td>Guided Imagery</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>119 (56.7)</td>
<td>143 (69.4)</td>
<td>90 (43.5)</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>73 (34.8)</td>
<td>46 (22.3)</td>
<td>76 (36.7)</td>
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<tr>
<td>Weekly</td>
<td>16 (7.6)</td>
<td>16 (7.8)</td>
<td>40 (19.3)</td>
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<tr>
<td>Daily</td>
<td>2 (1.0)</td>
<td>1 (.5)</td>
<td>1 (.5)</td>
</tr>
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</table>
Instruments

All participants were asked to complete a demographic questionnaire as well as various scales measuring self-reported levels of self-compassion, mindfulness, and counselor self-efficacy.

Demographic Survey

Demographic information collected included age, gender, ethnicity, educational levels and background, as well as frequency and type of mindfulness practices. Racial and ethnic makeup was determined by asking participants to choose one of seven options. Participants were also given seven options to report educational background. Frequency of mindful practice was reported by asking respondents how often they participated in activities that included mindfulness meditation, progressive muscle relaxation, and guided imagery. The demographic survey is located in appendix B.

Five Facet Mindfulness Questionnaire (FFMQ) (Baer et al., 2006)

The FFMQ 39-item scale is based on a factor analytic study that explored items from five independently developed mindfulness scales (Baer et al., 2006). Using a statistical analysis to pool all 112 items of other mindfulness questionnaires, five facets were found; observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience (Baer et al., 2006). (1) Observing facet is measured through questions asking about attention to internal stimuli, such as sensations, emotions, and cognitions, as well as external stimuli such as sights, sounds, and smells. (2) Describing facet involves noting or labeling stimuli with words (which includes identifying feelings). (3) Acting with awareness refers to actively attending to
one's actions, rather than mindlessly or impulsively behaving. (4) Non-judging refers to questions tapping into one's nonjudgmental attitude of one's inner experiences that include sensations, cognitions and emotions. (5) Non-reactivity to inner experiences is measured with items that explore allowance of experiences such as feeling and thoughts to come and go, without getting caught up in them. Responses to the items are given on a five-point Likert-type scale (1 = never or very rarely true, 5 = very often or always true). Total FFMQ scores are completed by computing the mean, which give possible range of scores from 1-5. Higher overall FFMQ scores (i.e. mean of 4 or 5) are associated with higher self-reported levels of mindfulness facets: describing, observing, non-reacting, non-judging, and acting with awareness. Lower scores (i.e. mean of 1 or 2) indicate the person may often have difficulty with paying attention or and have a tendency to judge themselves.

All of the facet subscales are reported to have good internal consistency, validity, and reliability (Baer et al., 2006). The development and psychometrics of the FFMQ have demonstrated to be reliable for both non-meditators and meditators. Baer and others (2008) examined these two groups and found a significant relationship between mindfulness facets and meditation experience, well-being, and psychological symptoms.

In order to assess the reliability of the various instruments used in this study, Cronbach’s $\alpha$ was computed as a measure of internal consistency for each total scale. In appendix G, table 12, this study’s coefficients was compared with published $\alpha$ coefficients for each instrument. Based on this reliability estimates, FFMQ is demonstrated to have strong reliability, $\alpha = .90$. The participant mean for the FFMQ was
Scale means, ranges, and standard deviations are summarized in Appendix G, table 13.

**Self-Compassion Scale (SCS) (Neff, 2003a)**

SCS is the most widely used scale for self-compassion. Concurrent validity, convergent validity, discriminate validity, and test-retest reliability ($\alpha = .93$) have been demonstrated with this scale (Neff, 2003a; Neff et al., 2007). Additionally, it has been found to be positively correlated with mindfulness (Baer et al., 2006). Self-compassion will be measured by a 26-item self-report measure comprised of six subscales: (1) Self-Kindness (2) Self-judgment (3) Common Humanity (4) Isolation (5) Mindfulness (6) Over-Identification. A five-point likert-type scale is used ranging from 1 (almost never) to 5 (almost always). Total scores were calculated by computing the mean of the scores, with a possible range of 1-5, lower scores indicating lower levels; higher scores indicating higher levels of self-compassion facets.

In the current study, reliability analysis indicated the SCS demonstrated strong reliability ($\alpha = .95$). Mean participant scores of SCS were 3.23, SD = .73. Both of these analyses were similar to previous participant data in past research (Neff, 2003a).

**Counselor Self-Efficacy Scale (CSES) (Melchert, Hays, Wiljanen, & Kolocek, 1996)**

This scale was created to measure clinicians’ knowledge and competencies with their therapy clients. It consists of 20 items with a five-point Likert-type response scale ranging from ‘agree strongly’ to ‘disagree strongly’. Developed from a literature review concerning skill competencies and knowledge required by counselors, empirical support was found for both reliability and validity of the CSES (Melchert, Hays, Wiljanen, &
Kolocek, 1996). This scale has also been measured on experienced clinicians in addition to counselors-in-training. Internal consistency and test-retest coefficients were high, as well as convergent validity. The range of possible scores is 1-5, with higher scores indicating higher levels of counselor self-efficacy, and lower scores indicating the contrary. To compute the score, scores are then averaged and can range from 1-5. CSES participant scores had an overall mean of 3.85 (SD = .46). Reliability analysis for the current study demonstrated CSES to have strong reliability (α = .87). Both of these findings were similar to previous research (Melchert et al., 1996).

**Procedure**

After approved by the UND Institutional Board, the principal investigator sent email messages to recruit participants through university listservs to training directors with requests to forward message to students in graduate counseling-related programs. Emails were sent to programs that included counseling psychology, clinical psychology, and other counseling-related programs. Participants were asked to complete the survey online. Completing the questions took an average of 15-20 minutes. Participants were presented with a consent form before beginning the survey and consent to participate was collected implicitly online. Participation is anonymous and identifying information was separated from participant responses. Participants did not receive compensation for their participation, but had the opportunity to put their name in an online draw that made them eligible to win one of four 25$ online gift cards. Data collection began in October 2013 and was completed in February 2014.
Inclusion Criteria

Participants were required to meet certain criteria in order to participate in the current study. Specifically, students in training for clinical therapy were recruited for the study. Students in counseling psychology, counseling, clinical psychology, and clinical social work were invited to participate in this study. Students must have completed or been currently completing their clinical practicum experience.

Design

Using a quantitative descriptive design with a survey method, this quasi-experimental study allowed the constructs studied to be measured in detail and examine the strength of the relationship. The mindfulness construct is the independent variable, self-compassion is the mediating variable, and CSE is the dependent variable.

Data Analyses

The Statistical Package for Social Sciences, Version 21 (SPSS) was used to store and analyze data. Prior to conducting the analyses, data was inspected for normality, excessive missing cases, and outliers. All analyses were completed using either SPSS Version 13.0 or Statistical Analysis System (SAS) 9.3. During the initial stages of data analyses, scores were totaled for the FFMQ, SCS, and CSES. The demographic questions were coded and rated based on frequency of mindful practices, as well as aspects such as: gender, education, and race/ethnicity. A one-way Anova was run to examine differences between groups. Descriptive statistics were completed to summarize the demographics of participants.

The main analyses consisted of completing Pearson correlations between scale
scores, as well as a mediation analysis, to examine the strength of the studied variables, mindfulness and self-compassion, on the outcome variable-counselor self-efficacy. A Sobel’s method was conducted to examine the significance of the mediating variable.

The main area of interest in the current study lies at the correlational level of scale scores, as well as the pathanalysis, as these tests confirmed or disconfirmed proposed hypotheses with this study.
CHAPTER III

RESULTS

The purpose of this study was to explore the relationship between mindfulness and counselor self-efficacy (CSE), with consideration to the mediating role of self-compassion. The results of the current study are presented in this chapter in two sections. The first section reports the results of the main analyses to test the hypotheses of the study. The second section reports the results of the post-analyses. Statistical procedures used were: Pearson and Spearman correlations, factor analysis, and regression mediation analysis.

Main Analyses

The primary research question of this study was: What is the relationship between mindfulness and CSE and how does self-compassion impact that relationship? Three research questions and six hypotheses were developed. The results of the statistical analyses used to examine these questions and hypotheses are presented here.

Research Question 1

What is the bivariate relationship between mindfulness, CSE, and self-compassion? The Pearson correlation analysis was used to statistically measure the hypotheses.

Hypothesis Ia: according to hypothesis Ia, there will be a statistically moderate
positive relationship between mindfulness and CSE. The results of the correlation analysis indicated a statistical strong correlation between mindfulness and CSE, \( r = .40 \). Hence, hypothesis Ia was supported. These results indicate there is an existing relationship between levels of CSE and mindfulness.

Hypothesis Ib: according to hypothesis Ib, there will be a statistically significant moderate positive relationship between self-compassion and CSE. The results indicate this hypothesis was supported as these two variables demonstrated a moderate positive relationship, \( r = .37 \). These results indicate a relationship between levels of self-compassion and CSE.

Hypothesis Ic: a statistically significant strong positive relationship was predicted between mindfulness and self-compassion. A Pearson correlation analysis indicated a very strong positive relationship, \( r = .72 \), between these two variables, demonstrating levels of mindfulness and self-compassion are related to each other.

All scale scores were significantly correlated with one other, suggesting that one who has high levels of CSE or self-compassion, are also likely to report higher levels of mindfulness. The correlation coefficients are presented in Table 3 below.

Table 3

*Three Scale Pearson Product-Moment Correlations (\(N=213\))*

<table>
<thead>
<tr>
<th></th>
<th>FFMQ</th>
<th>SCS</th>
<th>CSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFMQ</td>
<td>----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCS</td>
<td>.72*</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>CSES</td>
<td>.40*</td>
<td>.37*</td>
<td>----</td>
</tr>
</tbody>
</table>

* \(p < .01\) (2-tailed); FFMQ = Five Facet Mindfulness Questionnaire; SCS = Self-Compassion Scale; CSES = Counselor Self-Efficacy Scale*
Research Question 2

What is the relationship between mindfulness, self-compassion, and CSE, within a regression path model that specifies a relationship between mindfulness and CSE partially mediated by self-compassion?

A regression mediation analysis was completed to examine how the variables individually predicted the dependent variable. The hypotheses used to test these questions proposed that the path model would account for a statistically significant portion of the variance in CSE. To test the multiple hypotheses, a mediation analysis was conducted according to causal steps criteria outlined by Baron and Kenny (1986). Using this method, the total effect (c path) from the independent variable (i.e. mindfulness) to the dependent variable (i.e. CSE) is proposed to be significant. The direct path (a path) from the independent variable to the mediator (i.e. self-compassion) is also hypothesized to be significant. Finally, the mediator is proposed to be a significant predictor of the dependent variable when both the independent variable and the mediator concurrently predict the dependent variable (b path) (Refer to Figure 1 for an illustration of path results). The model hypothesized that mindfulness would be a significant predictor of CSE when self-compassion acts a mediator. The indirect effect of the independent variable on the dependent variable through the mediator was also computed. The products of coefficients (i.e. Sobel’s z test) tested the mediated effect, and the model was also tested for significance. Standardized regression weights for the total, direct, and indirect paths are presented in Table 4 as are the Adjusted $R^2$ values.

Hypothesis IIa: mindfulness scores are hypothesized to predict CSE scores.
Results for this hypothesis were significant, indicating that the mindfulness scores significantly predicted CSE scores when ignoring the mediator variable, $\beta = .48$, $t (211) = 6.38$, $p < .001$. Of the total variance, 16% of the variance of CSE can be accounted for by the linear combination of the independent variable, mindfulness, $F (1,211) = 40.71$, $p<.001$.

In exploring the direct effect of mindfulness on mindfulness and self-compassion, 52% of the variance found in self-compassion was accounted for by mindfulness, $F (1, 211) = 226.64$, $p <.001$. This step was significant, $\beta = 1.36$, $t (211) = 15.06$, $p < .001$, indicating mindfulness is a predictor of self-compassion.

Hypothesis IIb: Self-compassion is predicted to act as a significant partial mediator in the relationship of mindfulness and CSE. Specifically, higher levels of self-compassion are predicted to strengthen the relationship between mindfulness and CSE. Findings showed that self-compassion was not a significant mediating variable on the dependent variable, $\beta = .11$, $t (210) = 1.87$, $p = .06$. 17% of the variance of the mean of CSE can be accounted for by self-compassion ($F = 226.64$, $p<.001$).

The overall model was not a fit because the direct effect of self-compassion on CSE was not significant. Thus, hypothesis IIb was not supported. In order to further confirm the findings, the product of the ab coefficients for the mediated path was completed which indicated that the mediated effects was non-significant, $a \times b = .15$. The Sobel test was also completed which indicated non-significance, $Sobel = 1.86$, S.E. = .08, $p = .06$. Results demonstrated that the overall model does not fit, and failure to reject the null indicates there is no evidence of model efficacy based on the outlined hypothesis.
### Table 4

**Pathanalysis of the Mediating Role of Self-Compassion**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Adj.R2</th>
<th>Standβ</th>
<th>S.E.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct effect of mindfulness on mediator (a path)</td>
<td>.52</td>
<td>1.36</td>
<td>.09</td>
<td>15.06**</td>
</tr>
<tr>
<td>Direct Effect of mediator on CSE (b path)</td>
<td>.17</td>
<td>.11</td>
<td>.06</td>
<td>1.87</td>
</tr>
<tr>
<td>Total Effect of mindfulness on CSE (c path)</td>
<td>.16</td>
<td>.48</td>
<td>.08</td>
<td>6.38**</td>
</tr>
<tr>
<td>Direct Effect of mindfulness on CSE (C’ path)</td>
<td>.17</td>
<td>.34</td>
<td>.11</td>
<td>3.11*</td>
</tr>
</tbody>
</table>

* *p < .01, **p < .001 (2-tailed)

CSE = Counselor Self-Efficacy; S.E. = Standard Error

---

![Diagram](image-url)

* *p < .01, **p < .001 (2-tailed)

Figure 1. Path Coefficients for Mindfulness, Self-Compassion, and Counselor Self-Efficacy Mediation Analysis.
Research Question 3

What is the relationship between mindful practice and self-reported levels of mindfulness? Statistical method used was a spearman correlational analysis.

Hypothesis IIIa: mindfulness practice was hypothesized to moderately correlate with mindfulness scores. As hypothesized, mindfulness scores were moderately correlated with frequency of a combination of mindful practices, $r = .38, p < .01$ and mindfulness meditation, $r = .40, p < .01$. Correlations are listed in Table 5. These results indicate that high FFMQ scale scores corresponded to higher frequency of mindful practice, while lower scores are associated with lower levels of mindful practice.

Table 5

*Spearman’s Correlations of Mindfulness Meditation, FFMQ scores, and Mindful Practices*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mindfulness Meditation</th>
<th>FFMQ</th>
<th>Mindful Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindfulness Meditation</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FFMQ</td>
<td>.40*</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td>Mindful Practices</td>
<td>.87*</td>
<td>.38*</td>
<td>-----</td>
</tr>
</tbody>
</table>

* $p < .01$ (2-tailed; FFMQ = Five Facet Mindfulness Questionnaire

There is evidence that mindfulness is most adequately measured by measuring frequency of mindful practice in addition to self-reported levels of mindfulness.

Mindfulness meditation was quantified by a demographic questionnaire that asked about frequency of mindfulness meditation. Mindful practice was determined by loaded factors from a set of demographic questions about self-care (Refer to the appendix B for more info on the demographic questions). Participants were asked how often they engaged in
particular activities that were implicitly coded as mindful or non-mindful. A factor analysis of these items determined that mindfulness meditation, guided imagery, and progressive muscle relaxation loaded onto factor 1 with primary loadings over .5 (the three values ranged from .777 to .812) and an Eigen value over 1 (Factor 1 eigenvalue = 2.76). Items are listed in Table 6. The sum of these factors was computed as one variable to define ‘mindful practice’ for research question 3.

Table 6.

5 –Factor Rotated Matrix of Items for Mindful Practice

<table>
<thead>
<tr>
<th>Source of Item and Content</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>How often do you participate in this activity in your personal life:</td>
<td></td>
</tr>
<tr>
<td>Yoga</td>
<td>.167</td>
</tr>
<tr>
<td>Dance</td>
<td>-.036</td>
</tr>
<tr>
<td>Sing</td>
<td>.073</td>
</tr>
<tr>
<td>Listen to music</td>
<td>.125</td>
</tr>
<tr>
<td>Reading</td>
<td>.302</td>
</tr>
<tr>
<td><strong>Progressive muscle relaxation</strong></td>
<td>.777</td>
</tr>
<tr>
<td>Watching TV/movies</td>
<td>.038</td>
</tr>
<tr>
<td><strong>Guided imagery</strong></td>
<td>.812</td>
</tr>
<tr>
<td><strong>Mindfulness meditation</strong></td>
<td>.778</td>
</tr>
<tr>
<td>Jogging/running</td>
<td>.090</td>
</tr>
<tr>
<td>Journal writing</td>
<td>.078</td>
</tr>
<tr>
<td>Tai-chi</td>
<td>-.004</td>
</tr>
<tr>
<td>Social supports</td>
<td>.103</td>
</tr>
<tr>
<td>Get a massage</td>
<td>.389</td>
</tr>
</tbody>
</table>

*Initial Eigen-Values*          | 2.76 | 1.49 | 1.22 | 1.11 | 1.08 |

*Percent Variance after extraction* | 19.74 | 10.63 | 8.71 | 7.95 | 7.68 |
Post-Hoc Analyses

Other analyses with descriptive data were conducted for exploratory purposes.

Correlational analysis for gender and scale scores revealed men scored higher on all three scale scores. No significant gender differences were found for CSE (Male mean = 3.88, SD = .44; Female mean = 3.83, SD = .47, \( p > .01 \)) or self-compassion scores (Male mean = 3.41, SD = .65; Female mean = 3.18, SD = .73, \( p > .01 \)). However, significant gender differences existed for mindfulness scale scores (Male mean = 3.56, SD = .34; Female mean = 3.38, SD = .39, \( p < .01 \)). See table 7 for more information.

Table 7

Comparison of Scale Score Means by Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>( p )</th>
<th>( t )</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFMQ</td>
<td></td>
<td></td>
<td>.006*</td>
<td>-.287</td>
</tr>
<tr>
<td>Male (n=39)</td>
<td>3.56</td>
<td>.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female (n=173)</td>
<td>3.38</td>
<td>.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCS</td>
<td></td>
<td></td>
<td>.057</td>
<td>-1.94</td>
</tr>
<tr>
<td>Male (n=39)</td>
<td>3.41</td>
<td>.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female (n=173)</td>
<td>3.18</td>
<td>.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSES</td>
<td></td>
<td></td>
<td>.571</td>
<td>-.57</td>
</tr>
<tr>
<td>Male (n=39)</td>
<td>3.88</td>
<td>.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female (n=173)</td>
<td>3.83</td>
<td>.47</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( p < .01 \); M = mean; SD = Standard Deviations

Level of education was explored with scale scores: CSE was found to significantly differ between Masters and Doctoral students, \( t = -2.27, \( p < .05 \), with doctoral student reporting higher levels of CSE. Neither self-compassion (\( t = 1.41, \( p > .05 \)) nor mindfulness scores (\( t = .18, \( p > .05 \)) significantly differed across level of education. Refer to Table 8 for description of scores.
Table 8

Comparison of Mean Scores with Level of Education

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (SD)</th>
<th>$p$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FFMQ</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters (n=61)</td>
<td>3.42 (.34)</td>
<td>.86</td>
<td>.18</td>
</tr>
<tr>
<td>Doctoral (n=152)</td>
<td>3.41 (.40)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SCS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters (n=61)</td>
<td>3.34 (.69)</td>
<td>.16</td>
<td>1.41</td>
</tr>
<tr>
<td>Doctoral (n=152)</td>
<td>3.20 (.74)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CSES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters (n=61)</td>
<td>3.73 (.45)</td>
<td>.024*</td>
<td>-2.27</td>
</tr>
<tr>
<td>Doctoral (n=152)</td>
<td>3.89 (.46)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$p < .05$ (2-tailed)

A spearman correlation was conducted to explore if variables such as ‘amount of practicum years completed and ‘frequency of mindfulness meditation’ correlated with scale scores. It was found that frequency of mindfulness meditation did significantly correlate with scale scores, indicating higher frequency of mindful practice corresponded to higher levels of scale scores. For amount of practicum years completed, a moderate positive correlation was found with CSE($r = .33$, $p < .05$) and a small correlation with mindfulness ($r = .16$, $p < .05$). No significant correlation was found with self-compassion and amount of practicum years completed ($r = .12$, $p > .05$)

Table 9

Spearman Correlations of Frequency of Mindfulness Meditation with Scale Score Means

<table>
<thead>
<tr>
<th>Variable</th>
<th>FFMQ</th>
<th>SCS</th>
<th>CSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of Mindfulness Meditation</td>
<td>.37*</td>
<td>.35*</td>
<td>.20*</td>
</tr>
<tr>
<td>Year of Practicum</td>
<td>.16*</td>
<td>.12</td>
<td>.33*</td>
</tr>
</tbody>
</table>

*p < .05* $p < .01$ (2-tailed)
Summary

Hypothesis I was supported. The independent variables, mindfulness and self-compassion, were significantly correlated with the dependent variable, CSE. Hypothesis II was partially supported. A mediation analysis indicated that mindfulness was a significant predictor of CSE. However, self-compassion was not found to be a significant mediator in the relationship of mindfulness and CSE. As predicted for hypothesis III, mindfulness scores were moderately correlated with frequency of mindful practice. Post-analyses revealed that although men scored higher scores on all the scales, only the CSES revealed significant gender differences. Results regarding educational background demonstrated doctoral students had significantly higher scores than master’s students for CSES. Completed years of training also significantly correlated with scale scores for FFMQ and CSES, but not for the SCS. Finally, frequency of mindful practice significantly correlated with all scale scores. These results provide clinical and research considerations, which are discussed next.
CHAPTER IV

DISCUSSION

In Chapter III, the relationship between mindfulness, self-compassion, and CSE was presented. In this chapter, a brief overview of the study is provided, the results are discussed, and limitations of the study are outlined. In addition, implications and areas for future research are discussed.

This study intended to contribute to counseling research literature by exploring factors that influence CSE. It was hypothesized that there would be a significant relationship between CSE and mindfulness, with self-compassion mediating the relationship. The results of the study were mixed. Several hypotheses were supported indicating a predictive relationship between mindfulness and CSE. However, the hypothesized mediating variable, self-compassion, was not supported.

Main Hypotheses

Hypothesis I

Past research suggested that mindfulness and self-compassion may be symbiotic variables that could predict CSE. Research question 1 explored the bivariate relationships between scores of mindfulness, self-compassion, and CSE. The statistically significant moderate relationship between mindfulness and CSE found in this study supported the relationship between these variables. This finding supported past research,
where moderate correlations were also demonstrated between these two variables (Greason & Cashwell, 2009; Hall, 2009).

Moreover, this research found a statistically significant moderate relationship between self-compassion and CSE. Although past research has indicated a relationship with self-compassion and CSE (Kane, 2010), it was qualitative in nature and is difficult to conduct comparisons between qualitative and quantitative research.

This research also demonstrated a statistically significant strong positive relationship between mindfulness and self-compassion. These findings corroborate past research that have predicted a strong relationship that mindfulness is related to self-compassion (Birnie, Speca, & Carlson, 2010).

Overall, the study replicates findings of previous correlational research. Results demonstrated significant positive relationships between all the examined variables. The strongest relationship was found between mindfulness and self-compassion, whereas the rest of the examined relationships were of moderate strength.

Although numerous studies have examined mindfulness as a construct (Baer, 2003; Bishop 2002), very little research has been completed on the relationship between mindfulness and counselor self-efficacy. Furthermore, no prior quantitative research has examined the relationship between CSE and self-compassion. Given that the levels of CSE can impact a counselor trainee’s performance and stress levels (Friedlander et al., 1986; Kopala, 1987), which can directly affect therapeutic relationships and client outcomes, an examination of various factors that hinder or enhance CSE is imperative in counselor education research.
The next step in understanding factors influencing CSE is by exploring the degree of predictive strengths that mindfulness and self-compassion have on CSE. Mediation analysis was used to determine whether self-compassion is a mediator process through which mindfulness predicts CSE.

**Hypothesis II**

Past research has indicated an existing relationship between mindfulness, self-compassion, and CSE. However, the strength of these relationships has not been fully understood. In this study, mindfulness was found to be a significant predictor of CSE. The significant predictive relationship between mindfulness and CSE is consistent with another empirical study (Greason & Cashwell, 2009). This relationship indicates that those who are more mindful are also more likely to feel competent when working with clients and believe that they have the appropriate judgment to know when to utilize various counseling skills with their clients. It is possible that those who practice mindfulness in their personal life are able to apply the mindful practice to clinical use. Mindfulness facets such as the ability to be ‘non-reactive’ and ‘non-judgmental’ can be useful skills that can assist in maintaining focus when working with clients. Additionally, other mindfulness facets such as the ability to ‘act with awareness’ and to be ‘observant’ are applicable clinical skills that may help clinicians-in-training feel more competent, versus feeling distracted and having difficulty concentrating in client sessions. Finally, people with high levels of the ‘describing’ facet report that they are able to easily describe their thoughts and feelings. This skill would also translate well to feeling competent when describing or interpreting aspects of client’s phenomenological experiences.
It was also found that those students who are more mindful in their everyday experience are also more likely to be compassionate towards themselves. This corroborates with past research of a strong relationship with mindfulness and self-compassion (Shapiro et al., 2007). The predictive relationship between mindfulness and self-compassion in the counseling students in this study likely may be indicative of these two variables sharing some similarities particularly with non-judgment and mindfulness. These findings suggest that mindfulness may be an important tool for cultivating self-compassion in counseling students and compassion for clients, as well as buffering clinician burnout (Kane, 2010).

In examining self-compassion as a potential mediator in the relationship of CSE and mindfulness, the statistical insignificant findings demonstrate the hypothesis was not supported. Given the past support for the importance of self-compassion for CSE (McCollum & Gerhart, 2010), and the strong link between mindfulness and self-compassion, the insignificant finding was surprising. Postulations for this seemingly incongruous result are discussed below.

The very strong correlation between self-compassion and mindfulness suggest that there may be a somewhat conceptual overlap between the two variables. Although FFMQ and SCS have distinct scales, similarities between subscales may have influenced mediation findings. Both SCS and FFMQ are comprised of a self-judging subscale. As well, SCS has a mindfulness subscale, which may be similar to several FFMQ items. Examining the subscales separately may have been appropriate for the mediation analysis. Another reason for the insignificant findings could be associated with using the
Sobel test, which explores the significance of the mediation effect. Although the Sobel test is more accurate than other tests in calculating indirect mediation effects (MacKinnon et al., 2002), a large sample is required to detect significant effects. Given that the \( p \) value was very close to .05 (\( p = .06 \)), it is possible that with an increased sample, a mediation effect would have been detected.

Another possibility for the contrary findings with existing research could be due to a difference in the study sample. According to Kane (2010), clinicians who practice mindfulness found self-compassion to directly impact levels of clinician efficacy. Note that this past research was qualitative in nature and expert mindfulness practitioners were recruited for Kane’s study. It is conceivable that the mediation effect of self-compassion may be expressed differently in distinct populations. As well, the purpose of qualitative research is neither to be conclusive nor generalizable, and thus, it can be difficult to compare qualitative findings to quantitative research.

Although mindfulness is a predictive variable for self-compassion and CSE, self-compassion does not appear to significantly mediate the examined relationship. This finding was contrary to existing research suggesting that self-compassion acts as a mediating variable between mindfulness and CSE.

**Hypothesis III**

In past research exploring mindfulness, mindfulness researchers (Davis & Hayes, 2011) have noted that less mindful people may inaccurately reported inflated levels of mindfulness because they are not aware of what mindfulness is. Other mindfulness research has used various methods in addition to self-report to measure mindfulness
(Grepmaier et al., 2007), which has been reported to provide stronger evidence for the utility of mindfulness interventions. Thus, it is suggested to explore frequency of mindful practice when using self-reported mindfulness scales to substantiate response validity. The significant relationship found between mindfulness scores and practice in this study provides evidence indicating that people who practice mindfulness are likely to report less reactivity and judgment as well as report they are more observant, aware, and have a better ability to describe their internal and external experiences compared to non-practicing participants. These results indicate mindful practice may impact state levels of mindfulness and provide support for the utility of mindfulness in counselor training.

**Post-Hoc Analyses**

Exploring gender and scale scores revealed males scored higher on all three scale scores but only significant differences were revealed for mindfulness. These results are surprising, as past research has indicated males generally exhibit significantly higher levels of self-compassion (Neff 2003a). Approximately only 1/5 of the participants were males, which could account for the unique findings for this population.

Mean comparisons between masters and doctoral students were explored across the three scale scores. Doctoral students scored significantly higher on CSE. These findings support previous research that doctoral student tend to have higher levels of CSE than masters students (Melchert et al., 1996). However, no significant differences were found between levels of educational groups for mindfulness and self-compassion. This is unlike past research, which has found mindfulness to increase as level of training progresses (Greason & Cashwell, 2007).
Additional examination of educational training yielded similar results when explored with scale scores. A correlational analysis involving years of practicum completed, indicated a positive significant correlation with CSE, and no significant correlations were found with mindfulness and self-compassion. A small positive non-significant correlation was found with both mindfulness and self-compassion when correlated with practicum year, indicating that those with more practicum experience do not significantly report higher levels of mindfulness and self-compassion. Unlike CSE findings, which support past research (Melchert et al., 1996), past mindfulness research has demonstrated a significant positive correlation with counseling experience (McCollum & Gehart, 2010). It is possible that the combination of non-mindful and mindful counselor trainees confounded research.

Frequency of mindfulness meditation was also compared to scale mean scores, which yielded significant positive moderate correlations across all the scale scores. These findings indicate that participants who report mindful practice tend to report higher levels of mindfulness, self-compassion, and CSE. This provides utility to the practice of mindful interventions for counselor trainees, suggesting that mindful practice may increase levels of mindfulness, self-compassion, and CSE.

Overall, the results of this study provide evidence of a predictive relationship between mindfulness and counselor education, particularly the existing relationship between mindful practice and CSE. However, the hypothesized mediating relationship of self-compassion between mindfulness and CSE was not supported.
Limitations of the Current Study

The limitations of the current study are noted here in an attempt to aid future research in avoiding such limitations. The first limitation is in regards to the quasi-experimental survey design utilized for the current study. The hallmark of a quasi-experimental design is the lack of randomization of participant recruitment, which is a threat to internal validity. It is possible that participants who agreed to participate are different from those who did not choose to participate. To counter the fact that randomization was not completed, a sound attempt was made to increase validity by not priming participants with the term ‘mindfulness’ in the recruitment email as well placing the demographic questions at the end of the survey that contained questions regarding mindfulness practice. This method was completed in order to ensure that the population represented a wide range of clinicians from a diversity of clinical backgrounds.

Another limitation is its reliance on self-report questionnaires. Participants could be unable to accurately assess themselves, which could confound the results. Using multiple different methods to measure constructs is recommended. Examples of other measures include, third-person report, observation, lab tasks etc. Although frequency of mindful practice was explored to verify self-reports of mindfulness skills, using other measurements to validate other self-reports would help to strengthen significance of results.

The lack of heterogeneity in the demographic background of the participants is another limitation. Given that approximately 80% of the participants identified as White, heterosexual, and female, the study’s findings are likely not an accurate representation of
persons other than the characteristics of the majority listed above.

Although self-compassion had a significant bivariate relationship with mindfulness and CSE, no mediating relationship was significantly determined. This indicates that although self-compassion is strongly correlated with mindfulness, there may be other mediators that account for the predictive relationship between mindfulness and CSE. A possible interpretation for the lack of significance with the self-compassion mediator is the smaller sample size of this study for a path-analysis. Further replication of this study is warranted with a larger sample size, which may impact the significant level of the mediator. Despite these limitations, the findings have important implications for counselor educators.

**Clinical Implications**

This study provides incentive for further exploring CSE and factors influencing this important construct in counselor education. Past CSE research has found significant relationships to client outcome (Orlinsky et al., 1994) as well as counselor anxiety and performance (Friedlander et al., 1986). Mindfulness is also a construct that has begun to receive attention in the last two decades in counselor education research. Past research has produced a large repertoire of mindful benefits for counselor trainees. This list, which is not exhaustive includes: increased client outcome (Grepmair et al., 2007), enhanced cognitive flexibility (Baer et al., 2006; Moore & Malinowski, 2009), attention (Goldin & Gross, 2010), as well as a decrease in emotional reactivity (Ortner, Kilner & Zelazo, 2007, Siegel, 2007a), anxiety, and stress (Chambers, Lo, & Allen, 2008). More specifically, mindful practice has been reported to improve important counselor qualities
such as empathy, compassion, and presence (Aiken, 2006). Another benefit reviewed for mindful practice is self-compassion, which is a trait and skill that has received recent attention as a way to alleviate counselor anxiety with skill-set (Hall, 2009) and enhance client outcome (Kane, 2010). For these reasons, CSE, self-compassion and mindfulness are important aspects to examine in research, and central elements for counselor educators, supervisors, and training directors to understand and foster in counselor trainees.

In this study, the results indicate mindfulness to be predictive of CSE. This finding suggests supervisors and educators should utilize mindfulness interventions to cultivate CSE. Research on counselor education methods is scant with regards to methods that improve counselor skills (Wyatt, 2012). Support for counselor benefits after short-term mindfulness interventions (Buser et al., 2012; Dunn et al., 2013) indicate that implementing mindful practice into existing counselor education practices could be time-efficient and cost effective. The significant correlations between mindful practice and all scale scores provide strong support that mindful practice can be used as a counselor education practice to aid in counselor development. Another avenue to apply mindful education is by cultivating CSE through mindful supervision, where the supervisor models a mindful presence as well as mindful skills such as non-judgment and non-reactivity (Wyatt, 2011).

In reviewing the mediating role of self-compassion, this current study does not support past research. The results of the current study indicate that other mediators such as attention (Greason & Cashwell, 2007) may be more useful when using mindfulness
skills to cultivate CSE. Even so, self-compassion’s significant correlations with CSE and mindfulness indicate the construct is still regarded as an important area for continued research in counselor development. The findings of the research provide credence for mindfulness interventions to be utilized for counselor training that can impact counselor self-efficacy.

**Recommendations for Future Research**

In addition to addressing the limitations of the present research, future studies should explore the usefulness of self-compassion in counselor training. Future investigations regarding self-compassion as a training tool with this population will need to demonstrate that self-compassion is predictive of CSE prior to implementing self-compassion training, and to consider the use of behavioral measures, in addition to self-report scales.

Regarding practice implications, findings substantiate that mindfulness is a significant predictor of CSE. Although counselor training programs are known for using external methods such as behavioral observations to measure competency, based on the present study, it seems important for training programs to address the internal skills of CSE. Implementing mindfulness interventions for counselors-in-training could serve as a useful tool in developing competency and to manage developmentally normal anxiety for beginner counselor trainees. As well, further exploring what types of students (i.e. level of anxiety, year in program, and educational background) may benefit more than others from mindfulness training is also another recommended future research avenue.

In order to determine the utility of mindfulness training, it is recommended that
future research use mindfulness intervention studies with a control group, and another
group focused on non-mindfulness interventions, to determine whether mindfulness
interventions are more useful than other interventions for counselor development.
Intervention research could aid in determining how much or how little mindfulness
training can affect CSE.

Additionally, the participants of this study were a mix of mindful and non-mindful
practitioners. Separating populations for the data analysis may provide more information
about these populations and could also impact how CSE is affected by self-compassion
and mindfulness. Specifically, the relationship of these variables may look different
between mindful practitioners vs. non-mindful practitioners.

Analyzing subscales of mindfulness and self-compassion is another recommended
area to explore. The present study examined the total score of these variables. Past
research studying mindfulness and self-compassion provided information on subscale
findings. It is possible that collapsing across domains could obscure the effects that these
subscale scores could have in relation to counselor self-efficacy. In order to identify the
unique effects of each distinct subscale score, a more detailed analysis of these variables
is recommended. Additionally, past studies have indicated that mindfulness facets can
operate in contrasting ways (Baer et al., 2006; Ortner et al. 2007), which could suggest
that some facets may be more beneficial to cultivate for counselor self-efficacy than other
facets. Overall, this study advances our knowledge of this population by showing that
mindfulness training could be considered as a useful intervention in counselor education.
Conclusion

In summary, this study confirmed prior findings that mindfulness, self-compassion, and CSE are significantly correlated with one another. Moreover, the findings support mindfulness as a significant predictor of CSE. Results of this study suggest replication of the study to determine mediating effect of self-compassion. Due to CSE’s important influence that it can have on counselor development, it is worth exploring whether the findings of this study will hold with replication. While this study certainly suggests that there is a relation between mindfulness and CSE, it must be replicated with intervention studies to determine to what extent mindfulness training can have on CSE. Despite the remaining questions, the present study represents a foundational step for further research and practice development in counselor education.
APPENDIX A

INFORMED CONSENT

TITLE of RESEARCH: Exploring Mental Health Providers’ Counseling Skills and Behaviors

You are invited to participate in a study that will attempt to understand perceptions of self as a competent counselor and self-care practices, and their relationship to counseling skills. The purpose of the study is to understand the views of oneself as a counselor-in-training and their relationship to counseling skills. We can then use this information to promote training methods related to the factors examined in this study. You have been selected for this study because you are a mental health provider-in-training. If you are under 18 years of age, please do not proceed with the rest of this study.

The study will take approximately 15-20 minutes to complete the survey. No risks are expected to result from participation in this study. If you decide to participate, you will be asked to complete an online survey, asking questions pertaining to skills of mental health providers-in-training. You will not be paid for participating in this research study. However, each participant will have the opportunity to put his or her name in a draw. There will be four prizes of $25 given out to participants who win the draw.

All information collected will be kept private. In any report about this study that might be published, you will not be identified. Results will be reported in an aggregated format only, meaning that there will be no way to connect your answers to your identity. Your participation in this study is on a voluntary basis. If at any time you decide not to participate, there will not be a penalty of any kind. The data will be stored on a secure server until it is analyzed at the Department of Counseling Psychology and Community Services at UND. After data entry, and a period of at least three years, the electronic data will be deleted. Only the researchers and Institutional Review Board auditors (who make sure the research participants are treated fairly) will have access to this data.

The study will be conducted by Sinead Unsworth MA, who is a graduate student in the Department of Counseling Psychology and Community Services at the University of North Dakota, under the direction of Dr. Dorlene Walker. Any questions or concerns about the study may be directed to Sinead Unsworth via email sinead.unsworth@my.und.edu or phone (701) 428-1149, or Dorlene Walker at (701) 777-3737 or email dorlene.walker@email.und.edu. If you have questions regarding your rights as a research subject, or if you have any concerns about the research, you may contact the University of North Dakota Institutional Review Board at (701) 777-4279. Please call this number if you cannot reach research staff, or if you wish to talk with someone else. Please save a copy of this consent form for your records.

By providing your electronic signature below, you agree to take part in this study and to all of the above information.
APPENDIX B

DEMOGRAPHIC SURVEY

Gender:
Female
Male
Other: ________

Age: _____

Your race/ethnicity:
African American/Black
American Indian/Native American/First Nations
Asian American/Pacific Islander
Caucasian/White
Hispanic/Latino
Other (please specify): ________

Your sexual orientation:
Bisexual
Lesbian/Gay
Heterosexual
Queer
Other: ________

Your current program:
Clinical Counseling/Community Mental Health
Counseling Psychology
Clinical Masters Social Work
Clinical Psychology
Marriage and Family Therapy
Other: ________

Please list the level of education you are currently completing:
Masters
Doctoral

Semesters of clinical practicum:____

Briefly describe your theoretical orientation in a few words:_____________

Please identify your philosophical/spiritual/religious tradition (if any) (i.e. Christian, Buddhist, Atheist etc.):_________________________
How often do you participate in these activities for each domain: personal life, professional life (for example: jog with colleague at work), and use or teach to clients (use as an intervention in session with client)? Please rate frequency of each activity.

<table>
<thead>
<tr>
<th>Never</th>
<th>Less than 1x/week</th>
<th>Every week</th>
<th>Everyday</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal life</th>
<th>Professional life</th>
<th>Use or teach to clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoga</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listen to music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Progressive Muscle Relaxation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching TV/Movies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guided Imagery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mindfulness meditation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jogging/running</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journal writing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tai-chi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socialize with friends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get a massage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please describe any formal training or education related to mindfulness/meditation:
Class or seminar specific to mindfulness
Mindfulness training with supervisor in practicum
Religious practice
Other (Please specify):____
APPENDIX C

FIVE FACET MINDFULNESS QUESTIONNAIRE

Description: Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>never or very rarely true</td>
</tr>
<tr>
<td>2</td>
<td>rarely true</td>
</tr>
<tr>
<td>3</td>
<td>sometimes true</td>
</tr>
<tr>
<td>4</td>
<td>often true</td>
</tr>
<tr>
<td>5</td>
<td>very often or always true</td>
</tr>
</tbody>
</table>

1. When I’m walking, I deliberately notice the sensations of my body moving.
2. I’m good at finding words to describe my feelings.
3. I criticize myself for having irrational or inappropriate emotions.
4. I perceive my feelings and emotions without having to react to them.
5. When I do things, my mind wanders off and I’m easily distracted.
6. When I take a shower or bath, I stay alert to the sensations of water on my body.
7. I can easily put my beliefs, opinions, and expectations into words.
8. I don’t pay attention to what I’m doing because I’m daydreaming, worrying, or otherwise distracted.
9. I watch my feelings without getting lost in them.
10. I tell myself I shouldn’t be feeling the way I’m feeling.
11. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.
12. It’s hard for me to find the words to describe what I’m thinking.
13. I am easily distracted.
14. I believe some of my thoughts are abnormal or bad and I shouldn’t think that way.
15. I pay attention to sensations, such as the wind in my hair or sun on my face.
16. I have trouble thinking of the right words to express how I feel about things.
17. I make judgments about whether my thoughts are good or bad.
18. I find it difficult to stay focused on what’s happening in the present.
19. When I have distressing thoughts or images, I “step back” and am aware of the thought or image without getting taken over by it.
20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
21. In difficult situations, I can pause without immediately reacting.
22. When I have a sensation in my body, it’s difficult for me to describe it because I can’t find the right words.
23. It seems I am “running on automatic” without much awareness of what I’m doing.
24. When I have distressing thoughts or images, I feel calm soon after.
25. I tell myself that I shouldn’t be thinking the way I’m thinking.
26. I notice the smells and aromas of things.
27. Even when I’m feeling terribly upset, I can find a way to put it into words.
28. I rush through activities without being really attentive to them.
29. When I have distressing thoughts or images I am able just to notice them without reacting.
30. I think some of my emotions are bad or inappropriate and I shouldn’t feel them.
31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.
32. My natural tendency is to put my experiences into words.
33. When I have distressing thoughts or images, I just notice them and let them go.
34. I do jobs or tasks automatically without being aware of what I’m doing.
35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.
36. I pay attention to how my emotions affect my thoughts and behavior.
37. I can usually describe how I feel at the moment in considerable detail.
38. I find myself doing things without paying attention.
39. I disapprove of myself when I have irrational ideas.

Scoring Information:
Observe items: 1, 6, 11, 15, 20, 26, 31, 36
Describe items: 2, 7, 12R, 16R, 22R, 27, 32, 37
Act with Awareness items:
Nonjudge items:
Nonreact items:
4, 9, 19, 21, 24, 29, 33
### APPENDIX D

**SELF-COMPASSION SCALE**

**HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES**

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

<table>
<thead>
<tr>
<th>Almost never</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Almost always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

1. I’m disapproving and judgmental about my own flaws and inadequacies.
2. When I’m feeling down I tend to obsess and fixate on everything that’s wrong.
3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.
4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.
5. I try to be loving towards myself when I’m feeling emotional pain.
6. When I fail at something important to me I become consumed by feelings of inadequacy.
7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.
8. When times are really difficult, I tend to be tough on myself.
9. When something upsets me I try to keep my emotions in balance.
10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.
11. I’m intolerant and impatient towards those aspects of my personality I don't like.
12. When I’m going through a very hard time, I give myself the caring and tenderness I need.
13. When I’m feeling down, I tend to feel like most other people are probably happier than I am.
14. When something painful happens I try to take a balanced view of the situation.
15. I try to see my failings as part of the human condition.
16. When I see aspects of myself that I don’t like, I get down on myself.
17. When I fail at something important to me I try to keep things in perspective.
18. When I’m really struggling, I tend to feel like other people must be having an easier time of it.
19. I’m kind to myself when I’m experiencing suffering.
20. When something upsets me I get carried away with my feelings.
21. I can be a bit cold-hearted towards myself when I’m experiencing suffering.
22. When I’m feeling down I try to approach my feelings with curiosity and openness.
23. I’m tolerant of my own flaws and inadequacies.
24. When something painful happens I tend to blow the incident out of proportion.
25. When I fail at something that’s important to me, I tend to feel alone in my failure.
26. I try to be understanding and patient towards those aspects of my personality I don't like.

Coding Key:
Self-Kindness Items: 5, 12, 19, 23, 26
Self-Judgment Items: 1, 8, 11, 16, 21
Common Humanity Items: 3, 7, 10, 15
Isolation Items: 4, 13, 18, 25
Mindfulness Items: 9, 14, 17, 22
Over-identified Items: 2, 6, 20, 24

Subscale scores are computed by calculating the mean of subscale item responses. To compute a total self-compassion score, reverse score the negative subscale items - self-judgment, isolation, and over-identification (i.e., 1 = 5, 2 = 4, 3 = 3, 4 = 2, 5 = 1) - then compute a total mean.
APPENDIX E
COUNSELOR SELF-EFFICACY SCALE

Using the following options, rate your counselor self-efficacy or ‘ability to do the following counseling skills.’

1 = disagree strongly  2 = disagree moderately  3 = neutral/uncertain  4 = agree moderately  5 = agree strongly

1. My knowledge of personality development is adequate for counseling effectively.
2. My knowledge of ethical issues related to counseling is adequate for me to perform professionally.
3. My knowledge of behavior change principles is not adequate.
4. I am not able to perform psychological assessment to professional standards.
5. I am able to recognize the major psychiatric conditions.
6. My knowledge regarding crisis intervention is not adequate.
7. I am able to effectively develop therapeutic relationships with clients.
8. I can effectively facilitate client self-exploration.
9. I am not able to accurately identify client affect.
10. I cannot discriminate between meaningful and irrelevant client data.
11. I am not able to accurately identify my own emotional reactions to clients.
12. I am not able to conceptualize client cases to form clinical hypotheses.
13. I can effectively facilitate appropriate goal development with clients.
14. I am not able to apply behavior change skills adequately.
15. I am able to keep my personal issues from negatively affecting my counseling.
16. I am familiar with the advantages and disadvantages of group counseling as a form of intervention.
17. My knowledge of the principles of group dynamics is not adequate.
18. I am able to recognize the facilitative and debilitative behaviors of group members.
19. I am not familiar with the ethical and professional issues specific to group work.
20. I can function effectively as a group leader/facilitator.

Use reverse coding for items 3, 4, 6, 9, 10, 11, 12, 14, 17, and 19
APPENDIX F

DEBRIEFING FORM

Dear Participant,

During this study, you were asked to rate your level of counselor skill development. You were told that the purpose of the study was to examine counselor skill development. The actual purpose of the study was to explore counselor skill development as it relates to mindfulness, self-compassion, and counselor self-efficacy.

I did not tell you everything about the purpose of the study because there was a risk that you may be primed to self-report in a particular way, which may have rendered the results non-significant. If you have any concerns about your participation or the data you provided in light of this disclosure, please discuss this with me. I will be happy to provide any information we can to help answer questions you have about this study.

If your concerns are such that you would now like to have your data withdrawn, and the data is identifiable, I will do so.

If you have questions about your participation in the study, please contact me-Sinead Unsworth at (701-428-1149), or my faculty advisor, (Dorlene Walker, 701-777-3737).

If you have questions about your rights as a research participant, you may contact the University of North Dakota Institutional Review Board at (701) 777-4279. Please call this number if you cannot reach research staff, or you wish to talk with someone else.

Please again accept our appreciation for your participation in this study.

If you would like to put your name in a draw, please provide your name and email address below. This information will not be paired with your data, and will be discarded immediately after the draw.
APPENDIX G

DEMOGRAPHIC STUDY RESULTS

Table 10. Current or Previous Program in Text ................................................... .94
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Table 13. Mean and Standard Deviations for Scales ..............................................97
### APPENDIX G

**DEMOGRAPHIC STUDY RESULTS**

Table 10

*Current or Previous Program in Text*

<table>
<thead>
<tr>
<th>Type of Program</th>
<th>N</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Clinical/Counseling/School</td>
<td>8</td>
<td>4.4</td>
</tr>
<tr>
<td>Forensic Psychology</td>
<td>7</td>
<td>3.8</td>
</tr>
<tr>
<td>Master of Social Work</td>
<td>4</td>
<td>2.3</td>
</tr>
<tr>
<td>Addiction</td>
<td>2</td>
<td>.9</td>
</tr>
<tr>
<td>Psy D</td>
<td>2</td>
<td>.9</td>
</tr>
<tr>
<td>Sport and Performance Psychology</td>
<td>2</td>
<td>.9</td>
</tr>
<tr>
<td>Health Education</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>College Counseling</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>School Counseling</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>School Psychology</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>International Disaster Psychology</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Table 11
Frequency of Personal, Professional, and Client Activities

<table>
<thead>
<tr>
<th>Frequency of Activity</th>
<th>Personal Practice N (%)</th>
<th>Professional Practice N(%)</th>
<th>Teach as a client intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindfulness Meditation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than once a week</td>
<td>78 (37)</td>
<td>122 (59.2)</td>
<td>59 (28.6)</td>
</tr>
<tr>
<td>Never</td>
<td>73 (34.6)</td>
<td>51 (24.8)</td>
<td>82 (39.8)</td>
</tr>
<tr>
<td>Weekly</td>
<td>49 (23.2)</td>
<td>26 (12.6)</td>
<td>55 (26.7)</td>
</tr>
<tr>
<td>Daily</td>
<td>11 (5.2)</td>
<td>7 (3.4)</td>
<td>10 (4.9)</td>
</tr>
<tr>
<td>Yoga</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>109 (51.4)</td>
<td>189 (90.9)</td>
<td>166 (80.6)</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>73 (34.4)</td>
<td>16 (7.7)</td>
<td>33 (16.0)</td>
</tr>
<tr>
<td>Weekly</td>
<td>25 (11.8)</td>
<td>3 (1.4)</td>
<td>7 (3.4)</td>
</tr>
<tr>
<td>Daily</td>
<td>5 (2.4)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Sing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>50 (23.8)</td>
<td>185 (89.8)</td>
<td>183 (90.1)</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>34 (16.2)</td>
<td>13 (6.3)</td>
<td>17 (8.4)</td>
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<tr>
<td>Weekly</td>
<td>53 (25.2)</td>
<td>7 (3.4)</td>
<td>3 (1.5)</td>
</tr>
<tr>
<td>Daily</td>
<td>73 (34.8)</td>
<td>1 (.5)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Dance</td>
<td></td>
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<tr>
<td>Never</td>
<td>80 (37.9)</td>
<td>193 (93.7)</td>
<td>188 (91.7)</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>94 (44.5)</td>
<td>11 (5.3)</td>
<td>14 (6.8)</td>
</tr>
<tr>
<td>Weekly</td>
<td>35 (16.6)</td>
<td>2 (1.0)</td>
<td>3 (1.5)</td>
</tr>
<tr>
<td>Daily</td>
<td>2 (.9)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Listen to Music</td>
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<td></td>
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<tr>
<td>Never</td>
<td>2 (.9)</td>
<td>96 (47.5)</td>
<td>109 (52.9)</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>8 (3.8)</td>
<td>40 (19.8)</td>
<td>64 (31.1)</td>
</tr>
<tr>
<td>Weekly</td>
<td>33 (15.6)</td>
<td>39 (19.3)</td>
<td>30 (14.6)</td>
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<tr>
<td>Daily</td>
<td>168 (79.6)</td>
<td>27 (13.4)</td>
<td>3 (1.5)</td>
</tr>
<tr>
<td>Progressive Muscle Relaxation</td>
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<td></td>
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<tr>
<td>Never</td>
<td>87 (41.2)</td>
<td>126 (62.4)</td>
<td>60 (29.1)</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>101 (47.9)</td>
<td>55 (26.8)</td>
<td>92 (44.7)</td>
</tr>
<tr>
<td>Weekly</td>
<td>16 (7.6)</td>
<td>199 (.3)</td>
<td>50 (24.3)</td>
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<tr>
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<td>3 (1.5)</td>
<td>4 (1.9)</td>
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<td>142 (69.3)</td>
<td>138 (67.6)</td>
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<tr>
<td>Less than once a week</td>
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<td>54 (26.3)</td>
<td>55 (27.0)</td>
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<td>10 (4.9)</td>
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<tr>
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<td>1 (.5)</td>
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Table 11 (continued)
Frequency of Personal, Professional, and Client Activities

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<tr>
<th>Frequency of Activity</th>
<th>Personal Practice N (%)</th>
<th>Professional Practice N (%)</th>
<th>Teach as a client intervention</th>
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<tbody>
<tr>
<td>Guided Imagery</td>
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<tr>
<td>Never</td>
<td>119 (56.7)</td>
<td>143 (69.4)</td>
<td>90 (43.5)</td>
</tr>
<tr>
<td>Less than once a week</td>
<td>73 (34.8)</td>
<td>46 (22.3)</td>
<td>76 (36.7)</td>
</tr>
<tr>
<td>Weekly</td>
<td>16 (7.6)</td>
<td>16 (7.8)</td>
<td>40 (19.3)</td>
</tr>
<tr>
<td>Daily</td>
<td>2 (1.0)</td>
<td>1 (.5)</td>
<td>1 (.5)</td>
</tr>
<tr>
<td>Reading</td>
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<tr>
<td>Never</td>
<td>7 (3.4)</td>
<td>38 (18.5)</td>
<td>77 (37.6)</td>
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<td>14 (6.8)</td>
<td>62 (30.2)</td>
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<tr>
<td>Weekly</td>
<td>55 (26.4)</td>
<td>62 (30.2)</td>
<td>56 (27.3)</td>
</tr>
<tr>
<td>Daily</td>
<td>111 (53.4)</td>
<td>91 (44.4)</td>
<td>10 (4.9)</td>
</tr>
<tr>
<td>Journal Writing</td>
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<td></td>
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<td>Never</td>
<td>124 (59.3)</td>
<td>149 (74.1)</td>
<td>62 (30)</td>
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<td>Less than once a week</td>
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<td>31 (15.4)</td>
<td>79 (38.2)</td>
</tr>
<tr>
<td>Weekly</td>
<td>25 (12.0)</td>
<td>19 (9.5)</td>
<td>61 (29.5)</td>
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<tr>
<td>Daily</td>
<td>3 (1.4)</td>
<td>2 (1.0)</td>
<td>5 (2.4)</td>
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<tr>
<td>Tai-Chi</td>
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<tr>
<td>Never</td>
<td>201 (96.6)</td>
<td>200 (99)</td>
<td>198 (97.1)</td>
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<td>2 (1.0)</td>
<td>5 (2.5)</td>
</tr>
<tr>
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<td>0 (0)</td>
<td>1 (.5)</td>
</tr>
<tr>
<td>Daily</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
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<tr>
<td>Social Supports</td>
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<td></td>
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<td>Never</td>
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<td>38 (18.5)</td>
<td>32 (15.6)</td>
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<tr>
<td>Less than once a week</td>
<td>22 (10.4)</td>
<td>27 (13.2)</td>
<td>28 (13.7)</td>
</tr>
<tr>
<td>Weekly</td>
<td>53 (29.7)</td>
<td>69 (33.7)</td>
<td>90 (43.9)</td>
</tr>
<tr>
<td>Daily</td>
<td>116 (54.7)</td>
<td>71 (34.6)</td>
<td>55 (26.8)</td>
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<tr>
<td>Get a Massage</td>
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<tr>
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<td>93 (44.5)</td>
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<td>164 (80)</td>
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<td>9 (4.4)</td>
<td>36 (17.6)</td>
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<tr>
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<td>5 (2.4)</td>
<td>0 (0)</td>
<td>4 (2.0)</td>
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<tr>
<td>Daily</td>
<td>0 (0)</td>
<td>1 (.5)</td>
<td>1 (.5)</td>
</tr>
<tr>
<td>Jogging/running</td>
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<td></td>
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</tr>
<tr>
<td>Never</td>
<td>85 (40.3)</td>
<td>191 (93.2)</td>
<td>127 (61.7)</td>
</tr>
<tr>
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<td>50 (23.7)</td>
<td>8 (3.9)</td>
<td>48 (23.3)</td>
</tr>
<tr>
<td>Weekly</td>
<td>62 (29.4)</td>
<td>5 (2.4)</td>
<td>26 (12.6)</td>
</tr>
<tr>
<td>Daily</td>
<td>14 (6.6)</td>
<td>1 (.5)</td>
<td>5 (2.4)</td>
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</table>
Table 12

*Instrument Scale Reliabilities*

<table>
<thead>
<tr>
<th>Scales</th>
<th>α</th>
<th>α in other Studies</th>
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<tbody>
<tr>
<td>FFMQ</td>
<td>.90</td>
<td>Total score not published, scores for subscales range .77-.91</td>
</tr>
<tr>
<td>SCS</td>
<td>.95</td>
<td>.92</td>
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<tr>
<td>CSES</td>
<td>.87</td>
<td>.91</td>
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</table>

Table 13

*Means and Standard Deviations for Scales*

<table>
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<th>Scale</th>
<th>N=213</th>
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<th>SD</th>
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<td>3.42</td>
<td>.38</td>
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<td>SCS</td>
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<tr>
<td>CSES</td>
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<td>3.85</td>
<td>.46</td>
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